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IMPACT OF THE TAX SYSTEM ON PRODUCTIVITY AND ECONOMIC GROWTH

HEARING

BEFORE THE

SUBCOMMITTEE ON OVERSIGHT OF THE INTERNAL REVENUE SERVICE

OF THE

COMMITTEE ON FINANCE UNITED STATES SENATE

NINETY-EIGHTH CONGRESS

SECOND SESSION

APRIL 13, 1984

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IMPACT OF THE TAX SYSTEM ON PRODUCTIVITY AND ECONOMIC GROWTH

FRIDAY, APRIL 13, 1984

U.S. SENATE, SUBCOMMITTEE ON OVERSIGHT OF THE INTERNAL REVENUE SERVICE, COMMITTEE ON FINANCE,
Washington, DC.

The committee met, pursuant to notice, at 9:39 a.m. in room SD-215, Dirksen Senate Office Building, the Honorable Charles Grassley (chairman) presiding.

Present: Senator Grassley.

[The press release announcing the hearing, the prepared statement of Senator Grassley, and the report from the Joint Committee on Taxation follow:]

[Press Release No. 84-133, April 2, 1984]

FINANCE SUBCOMMITEE ON OVERSIGHT OF THE INTERNAL REVENUE SERVICE SETS HEARING ON IMPACT OF THE TAX SYSTEM ON PRODUCTIVITY AND ECONOMIC GROWTH

Senator Charles E. Grassley (R., Iowa), Chairman of the Finance Subcommittee on Oversight of the Internal Revenue Service, announced today that the Subcommittee will hold a hearing to examine the impact of the Federal income tax system on productivity and economic growth.

The hearing will be held on Friday, April 13, 1984 at 9:30 a.m. in Room SD-215 of the Dirksen Senate Office Building.

"Too often we in Congress undertake revisions of the tax code, whether major or minor, without considering the effects of those revisions on the overriding goals of the tax policy to raise revenue in a way that promotes economic efficiencies, savings, productivity, and stable growth," Senator Grassley stated. "It is my intention to conduct a series of hearings that take a larger view of the Internal Revenue Code and how it is administered, beginning with this examination of how our tax laws relate to our productivity performance and economic growth."

Senator Grassley noted that "witnesses should be prepared to address such productivity issues as how the structure of the Internal Revenue Code and its administration by the IRS affects the ability of some taxpayers to use tax preferences effectively to control their tax liability: a situation that may adversely affect national productivity. In addition, witnesses may address the potential for gains in productivity performance from major changes of the tax system."

STATEMENT OF CHARLES E. GRASSLEY

The hearings that we begin today are potentially of great importance to the U.S. economy, to the role of our Nation as an industrial competitor in the world, and to the American worker and taxpayer. Dramatic changes have occurred in social and economic conditions in this country and elsewhere in the past few decades. One important change has taken place in American business and industry. According to some measures and to some observers, productivity has fallen in the U.S. economy. By productivity, I mean output per hour in the nonfarm sector.

We are not here today to examine the issue of productivity. Rather, as the Subcommittee of the Senate Finance Committee charged with Oversight of the Internal Revenue Service, we are here to begin a searching inquiry to determine whether the Internal Revenue Code has kept pace with the vast change of the past few years and

decades. Specifically, we want to know how the Code affects productivity, and whether the Code affects it for the benefit or the detriment of the U.S. economy.

The Internal Revenue Code has always played an important role in the conduct of business in this Nation. Many, if not most, key business decisions are based on the tax consequences. Should an employer enlarge or contract the workforce at a critical point in the tax year? Should a manufacturer or vendor allow inventory to accumulate or to be depleted? Should an industrial firm obtain capital to construct or purchase new plant or equipment? These and many questions like them are answered by top management and ownership daily in this country, and the answers often depend on tax advantages or disadvantages.

Despite the importance of the Internal Revenue Code, little is understood about its effect on business decisions. Little is understood, in short, about the effect of the Code on the productivity of the American worker. Finally, little is understood about the role of the Code in the volatile and rapidly changing environment that exists in American business and industry today, an environment influenced by technological innovation, worldwide competition, and many other factors.

The Subcommittee hopes that the series of hearings beginning to day will provide the Senate and the American people with the kinds of information, ideas, recommendations, and insights that will help us to determine the best tax structure for the coming years. We may learn that the present system actually inhibits productivity. We may also learn that alternative systems may be available that could greatly stimulate productivity and help to insure American's pre-eminence in the world economy.

Whatever we learn in these hearings, we must be ready to consider fundamentally new ways of evaluating these interrelationships, including new ways of taxing the workers and businesses in this Nation. We must keep our minds open about the possibility that a new road, difficult though it may be to build, may be in the best interest of this Nation.

The Subcommittee is privileged today to hear from seven distinguished observers of the tax system and the economy. They are drawn from the Federal Government, private industry, the financial community, and academe. I look forward to hearing from these witnesses. The first witness is the Honorable Charles E. McLure, Deputy Assistant Secretary for Tax Analysis at the Department of the Treasury.

Welcome, Mr. McLure.

The next witnesses are Mr. John M. Albertine, President, American Business Conference.

Mr. Luis Granados, Managing Director, The Employees Stock Ownership Association.

Mr. Robert J. Genetski, Vice President of the Harris Trust and Savings Bank of Chicago.

Dr. Richard W. Rahn, Vice President of the United States Chamber of Commerce.

Dr. Paul Craig Roberts, the William E. Simon Fellow in Political Economy at the Center for Strategic and International Studies and former Assistant Secretary of the Treasury for Economic Policy.

Dr. Norman B. Ture, President of the Institute for Research on the Economics of Taxation and former Under Secretary of the Treasury for Economic Affairs.

Mr. Barry Bosworth, Senior Fellow, Economic Program, at the Brookings Institution and former Chairman of the White House Council on Wage and Price Stability.

Mr. Jerry J. Jasinowski, Executive Vice President and Chief Economist of the National Association of Manufacturers.

Dr. Herbert E. Striner, Professor of Business Economics in the College of Business Administration at the American University.

BACKGROUND MATERIAL RELATING TO TAX SHELTER TRANSACTIONS, EFFECTIVE CORPORATE TAX RATES AND BROADENING THE INDIVIDUAL INCOME TAX BASE

Material From Prior Publications of the Staff

of the

JOINT COMMITTEE ON TAXATION

Prepared for the Use of the

SUBCOMMITTEE ON OVERSIGHT OF THE
INTERNAL REVENUE SERVICE

of the

COMMITTEE ON FINANCE

At the

Subcommittee Hearing

on April 13, 1984

April 12, 1984

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INTRODUCTION

This document is prepared as background material for the use of the Finance Subcommittee on Oversight of the Internal Revenue Service at its hearing on April 13, 1984. The hearing is on the impact of the Federal income tax system and tax administration on productivity and economic growth.

The xeroxed material in this document is from two prior Joint Committee on Taxation staff pamphlets. The sections entitled "Overview of Tax Shelters," "Summary of Income Tax Provisions Designed to Limit Tax Shelters," and "Economic Analysis" are from the 1984 staff pamphlet entitled "Proposals Relating to Tax Shelters and Other Tax-Motivated Transactions" (JCS-5-84, February 17, 1984). The section entitled "Study of 1982 Effective Tax Rates of Selected Large U.S. Corporations" is from the 1983 staff pamphlet of the same title (JCS-57-83, November 14, 1983).

Also included is a separately attached 1982 Joint Committee Staff pamphlet entitled, "Analysis of Proposals Relating to Broadening the Base and Lowering the Rates of the Income Tax" (JCS-36-82, September 24, 1982).

OVERVIEW OF TAX SHELTERS

Many of the tax-motivated transactions addressed in this pamphlet are commonly known as tax shelters. This section discusses some of the features of tax shelters.

A. THE NATURE OF A TAX-SHELTER INVESTMENT

In general, a tax shelter is an investment in which a significant portion of the investor's return is derived from the realization of tax savings with respect to other income, as well as the receipt of tax-favored (or, potentially, tax-exempt) income from the investment itself. Generally, tax shelters are passive investments in the sense that the investor is not involved in actively managing a business. Tax shelters are typically characterized as abusive if they are structured to give the investor larger tax benefits than may be warranted under present law, or to take advantage of uncertainties in the law primarily to obtain tax benefits, without regard to the economic viability of the investment.

In some instances, tax shelters take advantage of specific incentives, such as the accelerated cost recovery system or the deduction for intangible drilling costs, which Congress has legislated. Other shelters use devices in the tax law to achieve tax savings which were never specifically intended by Congress. Still others inflate certain deductions, credits, etc. beyond the properly allowable amount.

B. THE ELEMENTS OF A TAX SHELTER

Although tax-shelter investments take a variety of forms, there are several elements that are common to most tax shelters. The first of these is the "deferral" of tax liability to future years, resulting, in effect, in an interest-free loan from the Federal Government. The second element of a tax shelter is the "conversion" of ordinary income (subject to tax at a maximum rate of 50 percent for individuals) to tax-favored income (such as capital gains subject to tax at a maximum rate of 20 percent). Finally, many tax shelters permit a taxpayer to leverage his investment (*i.e.*, to use borrowed funds to pay deductible expenditures), thereby maximizing the tax benefit of deductibility. These elements of a tax shelter are described below.[1]

1. Deferral

Deferral generally arises from the acceleration of deductions to reduce a taxpayer's tax liability in the early years of an investment so that income is concentrated in the later years Deferral also occurs when, for example, taxpayers funnel U.S. investments

[1] The elements of a tax shelter investment are fully described in the pamphlet "Overview of Tax Shelters" (JCS-22-75), published in 1975 by the staff of the Joint Committee on Taxation.

through a foreign corporation the earnings of which are not subject to current U.S. tax.

The effect of deferral is that the taxpayer grants himself an interest-free loan from the Federal Government, which loan is repayable when the tax-shelter investment either produces taxable income or is disposed of at a gain. For example, if at the end of year one, a taxpayer wishes to have an additional loan for use in year two, he can obtain a one-year loan when the prevailing rate of interest is 15 percent (compounded annually), and repay $1,150 at the end of year two. Alternatively, the taxpayer could invest in a tax shelter that deferred tax on $2,000 of income until the following year. The taxpayer would have a $1,000 tax savings (at the 50-percent maximum rate of tax). In the latter case, at the end of year two, instead of repaying a lender $1,150 at an after tax cost of $1,075, the taxpayer would incur a Federal income tax of $1,000 on the $2,000 of income generated by the investment. Obviously, the longer the deferral period, the greater the benefit obtained by the taxpayer. In addition, the taxpayer could invest in another tax shelter to provide a "rollover" or further deferral of the tax.

In some cases, deferral is obtained by the use of legislatively sanctioned tax benefits, such as, for example, the Accelerated Cost Recovery System (ACRS) or the expensing of intangible drilling costs. Other benefits associated with deferral reflect the tax law's treatment of the time value of money, and are discussed at length in Part V. below.

2. Conversion of Ordinary Income

The second aspect of most tax-shelter investments is the "conversion" of ordinary income to tax-favored income (such as capital gains or income that is otherwise subject to a reduced rate of tax). Conversion is achieved when, for example, a taxpayer takes an accelerated deduction against ordinary income and receives income from the investment that is taxed at the 20-percent maximum capital gains rate. Also, if the taxpayer is in a lower tax bracket in the year when the investment generates income, he effectively "converts" the tax rate. Corporations benefit from converting ordinary income to dividend income eligible for the 85-percent dividends received deduction.

In the case of certain deductions (*e.g.*, depreciation deductions), as described in Part IV below, Congress has dealt with conversion by requiring a portion of the gain on disposition of an investment to be treated as ordinary income (rather than capital gains). However, the current recapture rules apply only to prevent the conversion of some ordinary income to capital gains, and do not apply to all tax shelters.

3. Leverage

The use of borrowed money to fund a tax-shelter investment may result in an economic benefit, as well as a tax benefit. Generally, a taxpayer will borrow an amount of money that equals or exceeds his equity investment. From an economic viewpoint, to the extent that a taxpayer can use borrowed money to fund a tax-shelter investment, he can use his own money for other purposes (such as

other investments), resulting in an increase in earnings if the investments are profitable. From a tax viewpoint, borrowed funds generally are treated in the same manner as a taxpayer's own money. Because a taxpayer is allowed deductions for expenditures paid with borrowed funds, the tax benefits of deductibility (*e.g.*, deferral) are maximized.

Because interest payments on indebtedness are themselves deductible, a debt-financed investment provides an additional tax advantage relative to an equity-financed investment. This is so because the deductibility of interest payments lowers the effective tax rate[2] on the income generated by the investment.

The benefits of leveraging a tax-shelter investment can be illustrated by a simple example. Assume that a 50-percent bracket taxpayer invests $10,000 of his own money, and borrows $90,000 to fund a $100,000 investment. If the investment generates a "tax loss" of $30,000 in the first year by reason of accelerated deductions, the taxpayer will save taxes of $15,000 on his investment of $10,000.

The significance of leverage increases where a taxpayer obtains a nonrecourse loan (i.e., when there is no personal liability to repay the loan). The benefits associated with the use of nonrecourse loans are discussed below.

To some extent, the tax benefits arising from interest deductions are offset by the tax paid on the lender's interest income. However, many lenders are tax-exempt, and taxable lenders tend to have lower marginal tax rates than do borrowers. As a result, debt financing tends to result in revenue losses to the Treasury.

C. SCOPE OF TAX SHELTER CASES

According to an industry newsletter, taxpayers invested approximately $8.4 billion in "public program" tax-advantaged investments (i.e, limited partnerships registered with the Securities and Exchange Commission) in 1983, compared to approximately $5.5 billion in 1982.[3] The largest increases from 1982 to 1983 were in real estate investments and investments in income-producing oil and gas properties. Many of these investments represented real capital formation for the economy; however, the data are indicative of the increasing use of abusive tax shelters as well. The flourishing of tax shelters in recent years has affected the administration of the tax laws in three ways. First, the limited audit resources of the Internal Revenue Service have increasingly been diverted to focus on tax shelters. Second, the judicial process, particularly the Tax Court, has been burdened by a substantial increase in the number of pending cases. Third, the rise of the tax-shelter industry may have contributed significantly to the general deterioration in compliance by undermining taxpayer confidence in the fairness and effectiveness of the tax laws.

With respect to audit resources, resource constraints on the Internal Revenue Service have combined with growth in the number

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[2] The effective tax rate on income derived from an investment is the amount of tax paid per dollar of income earned. The concept of an "effective tax rate" is explained more fully in the pamphlet "Analysis of Proposals for Depreciation and Investment Tax Credit Revisions, Part I: Overview" (JCS-18-81), published in 1981 by the staff of the Joint Committee on Taxation.

[3] Robert A. Stanger & Co., *The Stanger Report*, February 1984.

of taxpayers to reduce audit coverage from 2.11 percent of all individual income tax returns in 1979 to 1.50 percent in 1983. In 1979, the Internal Revenue Service examined 1,844,986 individual income tax returns. By 1982, that number had declined to 1,427,660 returns. At the same time the number of staff positions assigned to examination went from 22,911 to 24,071. At the end of 1983, there were 334,549 tax shelter cases in audit as compared with 182,731 at the end of 1979. During 1983, another 95,998 tax shelter cases were closed after examination with recommended taxes and penalties of $1.8 billion. Thus, although the closed tax shelter cases represented only 7 percent of examined cases, they accounted for 46 percent of the recommended taxes and penalties.

The increasing number of tax shelter returns has also contributed to the rising backlog of cases in the Tax Court. At the end of 1979, the Tax Court had 27,910 cases pending on its docket. In 1981, three additional judges were appointed to the Tax Court and the interest rate on deficiencies was increased. Also, between 1979 to 1983, the Tax Court more than doubled the rate at which it disposed of cases, closing almost 28,620 in 1983 as compared to 13,098 in 1979. Nonetheless, by the end of 1983, the backlog of docketed cases had risen to 57,869 cases. Approximately 20,000 of these cases (representing asserted deficiencies of $1.4 billion) were tax shelter cases.

Although the direct impact of tax shelters on the administrative and judicial process as quantified above is substantial, their indirect impact may be more significant. A major concern is that the highly visible marketing of tax shelters, and the accompanying belief that the Internal Revenue Service cannot deal with them, may erode taxpayers' confidence in the fairness and effectiveness of the tax system. Sociological research supports the proposition that taxpayers are more likely to comply with the tax laws when they perceive the system to be fair or when the costs of noncompliance are perceived as relatively high and relatively certain. The widespread use of tax shelters deprives the system of its claim to fairness and retards the administrative and judicial processes to the point that penalties seem neither certain nor costly.

SUMMARY OF INCOME TAX PROVISIONS DESIGNED TO LIMIT TAX SHELTERS

Beginning in 1969, Congress has enacted substantive and procedural income tax provisions that deal with tax-shelter investments. These provisions have generally been enacted in lieu of more basic changes. Often, they have been narrowly drafted to deal with a specifically perceived abuse. Exceptions have often been created to achieve specific policies.

Following are brief summaries of the major changes contained in the Tax Reform Act of 1969, the Revenue Act of 1971, the Tax Reform Act of 1976, the Revenue Act of 1978, the Economic Recovery Tax Act of 1981 (ERTA), and the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA).[1]

Minimum tax

In 1969, a minimum tax was enacted which applied to both individuals and corporations. The original minimum tax was an "add-on" tax which applied to a taxpayer whose defined tax preferences exceeded his regular tax by more than $30,000. In 1976, the tax rate was increased from 10 percent to 15 percent and the exemption greatly reduced. Since that time, the individual minimum tax has been amended several times.

TEFRA repealed the individual "add-on" minimum tax and replaced it with an "alternative" minimum tax beginning in 1983. This tax requires all individuals to pay a tax of at least 20 percent on their "economic" income (i.e., taxable income plus tax preferences) in excess of an exemption level of $40,000 for married couples and $30,000 for single taxpayers. The corporate "add-on" minimum tax was retained.

Investment interest limitation

Prior to 1969, a taxpayer was able to reduce tax on income from the taxpayer's professional or other income-producing activities by voluntarily incurring interest deductions attributable to tax-shelter investments. The 1969 Act limited the deduction for interest paid or incurred by an individual (and other noncorporate taxpayers) on funds borrowed to purchase or carry an investment. Under the 1969 Act, the deduction for investment interest was limited to 50 percent of the interest in excess of the taxpayer's net investment income, long-term capital gains, plus $25,000. The 1976 Act further limited the deduction for investment interest to $10,000 per year plus the taxpayer's net investment income. Disallowed interest deductions are carried over and may be deducted in future years.

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[1] See also pamphlet prepared by the staff of the Joint Committee on Taxation, "Background on Tax Shelters," JCS-29-83, June 23, 1983.

Investment tax credit: Noncorporate lessor limitation

The 1971 Act, which reinstated the investment credit, imposed limitations on the availability of the investment credit to individual (and other noncorporate) lessors. This provision was enacted to limit the extent to which individuals are able to utilize the tax benefits of leasing transactions (*i.e.*, the credit, depreciation deductions, and interest deductions) to shelter other income. Under present law, the investment credit is available to noncorporate lessors in only two situations: (1) if the leased property was manufactured or produced by the lessor, and (2) in the case of a short-term lease, where the lease term (including renewal options) is less than 50 percent of the useful life of the property, and for the first 12 months after the transfer of the property to the lessee, the sum of certain deductions allowable to the lessor with respect to the property exceeds 15 percent of the rental income produced by the property. The credit not usable by a noncorporate lessor may be passed through to a lessee (sec. 48(d)).

At-risk rules

Loss limitation.—As part of an effort to limit abusive tax shelters, the 1976 Act enacted an at-risk limitation to prevent a taxpayer from deducting losses in excess of the taxpayer's actual economic investment in an activity. The limitation applies to all activities except the holding of real property and certain corporate leasing transaction.[2]

Under the at-risk rules, a taxpayer may deduct losses (including depreciation) from an activity only to the extent of his or her aggregate at-risk investment in the activity at the close of the taxable year. In general, the at-risk investment includes (1) cash and the adjusted basis of property contributed by the taxpayer to the activity, and (2) amounts borrowed for use in the activity for which the taxpayer has personal liability for repayment. This amount is generally increased by the taxpayer's share of net income from the activity and decreased by its share of losses. At-risk investment does not include the proceeds of nonrecourse loans. The at-risk amount also excludes (1) amounts borrowed from other participants in the activity, (2) amounts borrowed from related parties, and (3) amounts with respect to which the taxpayer is protected against loss through guarantees, stop loss agreements, or other similar arrangements. However, the at-risk rules often will not apply where the taxpayer is personally liable on a note for the purchase of property, which is then leased to a credit-worthy lessee on a long-term lease.

The at-risk rules are applicable to individuals and certain closely held corporations.[3] An exception is provided for certain equipment leasing activities (not including the leasing of master sound recordings and other literary or artistic properties) engaged in by closely

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[2] As enacted in 1976, the at-risk rules applied to four specific activities: (1) farming; (2) oil and natural gas exploration; (3) holding, producing, or distributing motion picture films or video tapes; and (4) leasing of personal property. The Revenue Act of 1978 extended the at-risk rules to other activities.

[3] The Revenue Act of 1978 expanded the at-risk rules to cover closely held corporations. A corporation is subject to the at-risk rule if more than 50 percent in value of its outstanding stock is owned (directly or indirectly) by 5 or fewer individuals.

held corporations. In the case of partnerships or S corporations, the rules are applicable at the partner or shareholder level. Thus, a partner is considered at-risk with regard to a loan to the partnership only if the partner is personally liable for repayment.

H.R. 4170, as reported by the Committee on Ways and Means October 21, 1983, would exempt certain active businesses conducted by closely-held corporations from the at-risk rules and make certain other modifications consistent with the general policy of the rules.

Investment tax credit.—ERTA added a new at-risk limitation with respect to the investment tax credit (ITC). The limitation applies to the same activities, and to the same taxpayers, as the loss deduction at-risk rules.

Under the ITC at-risk rule, the basis of property for ITC purposes may not exceed the taxpayer's at-risk investment in the property at the close of the taxable year. In general, the amount at-risk for ITC purposes is determined on the same basis as under the loss deduction rules. However, an exception is provided for amounts borrowed from certain "qualified lenders" (including banks, savings institutions, and other commercial lenders) or from governmental authorities. A taxpayer is considered at-risk with regard to these amounts if he or she has at least a 20 percent at-risk investment in the property (determined without regard to the exception).[4] The law also provides an exception for property used in connection with various alternative energy sources.

H.R. 4170, as reported by the Committee on Ways and Means October 21, 1983, would replace the ITC at-risk rule with a new rule which excludes from the ITC credit base the amount of nonrecourse financing (except certain commercial financing) with respect to a property. This rule would generally be consistent with the policy of the existing ITC rule.

Farm operations

Farm operations are governed by special tax provisions, many of which confer tax benefits on farming activities. Under law, the special tax rules available to farmers were utilized by passive tax-shelter investors who were motivated, in large part, by a desire to use the special farming rules to shelter income from other sources. The 1976 Act contained several provisions designed to reduce the tax incentives for passive tax-sheiter investors to invest in syndicated farming operations.

The 1976 Act limits the deductibility of prepaid feed, etc. by a farm syndicate, requires the capitalization of the pre-production expenses of a farm syndicate in growing fruits or nuts, and requires the use of the accrual method of accounting by farm corporations (other than certain small corporations and family corporations).

Recapture

The recapture rules under present law prevent the conversion of ordinary income to capital gains, by requiring gain on a sale or disposition of certain property to be taxed as ordinary income (rather

[4] In the case of partnerships and S corporations, the 20-percent test is applied at the partner or shareholder level.

than capital gains) to the extent depreciation deductions were taken with respect to the property.

Real estate.—Among the tax benefits derived from a real estate tax shelter are accelerated depreciation deductions. The 1969 Act imposed more stringent recapture rules on real estate investments, requiring a larger portion of gain attributable to accelerated depreciation deductions to be taxed as ordinary income. However, under the 1969 Act, residential real property received favorable treatment. With limited exceptions, the 1976 Act provided for complete recapture of all depreciation in excess of straight-line depreciation, regardless of whether the property was residential real property. However, unlike personal property, only accelerated depreciation deductions are recaptured. For low-income housing, recapture is phased out based on the length of time the property is held.

Finally, under the Accelerated Cost Recovery System enacted by ERTA, all gain or disposition of nonresidential real property whose cost is recovered on an accelerated basis over the allowable 15-year period will be treated as ordinary income, to the extent of recovery allowances previously taken under the prescribed accelerated method. Thus, in the case of nonresidential property, taxpayers may either use straight-line recovery with no recapture, or accelerated recovery with recapture of all recovery deductions to the extent gain is recognized.

Intangible drilling and development costs.—Under present law, an investor in an oil and gas tax shelter can defer tax liability by deducting intangible drilling and development costs against ordinary income. The 1976 Act contained a recapture provision that prevents the conversion of the ordinary income against which such deductions are taken to capital gains. The amount subject to recapture is the amount deducted for intangible drilling and development costs, reduced by the amounts which would have been deductible had those costs been capitalized and deducted through cost depletion.

Production costs

The 1976 Act contained a provision that requires a taxpayer (other than a corporation that is not an S corporation or a personal holding company) to capitalize production costs of producing films, sound recordings, books, or similar property, and to deduct such costs over the life of the income stream generated by the production activity. This provision prevents a taxpayer from accelerating production costs, and, thereby, producing a mismatching of income and expenses attributable to the activity.

Sports franchises: Player contracts

Under prior law, the purchaser of a sports franchise attempted to allocate a large portion of the purchase price to player contracts that could be depreciated. The amount allocated to player contracts usually represented a large portion of the purchase price, and could be depreciated over a short life. The depreciation deductions taken in the early years usually exceeded the income generated by the franchise and, thus, sheltered other income. On the other hand, upon a subsequent sale of the sports franchise, the seller attempted to allocate most of the sales price to other assets (such as goodwill)

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that were not depreciable and, therefore, not subject to recapture. Thus, a sports franchise tax shelter could be used to obtain conversion, as well as deferral.

Under the 1976 Act, on the disposition of a sports franchise (or the creation of a new franchise), the amount of consideration allocated to a player contract must not exceed the sum of the adjusted basis of the contract in the hands of the transferor and any gain recognized by the transferor on the transfer. On a sale or exchange of a franchise, there is a presumption that not more than 50 percent of the sales price is allocable to player contracts. Further, the 1976 Act provided special recapture rules for depreciation deductions taken with respect to player contracts.

Partnerships

The Tax Reform Act of 1976 contained numerous provisions intended to limit the use of partnerships for tax-motivated transactions. The 1976 Act amended the tax laws; (1) in the case of the provision relating to additional first-year depreciation (as subsequently amended by ERTA, an election to expense certain depreciable business assets) to require a limitation on the amount of the deduction to be applied to the partnership and to each partner, (2) to require guaranteed payments to a partner to be capitalized if those payments to a party who is not a partner would have to be capitalized, and to require costs of organizing a partnership or promoting or selling interests when incurred by the partnership to be capitalized, subject to an election to amortize organization fees over a period of 60 months or longer; and (3) to limit allocations of partnership income or loss to a partner to the portion allocable to the part of the taxable year during which he is a partner, and to provide that such allocations will be controlled by the partnership agreement unless they do not have a substantial economic effect, in which case the allocation is to be made in accordance with the parners' interests in the partnership. (Prior to the Act, the allocation provisions referred only to items of partnership income, loss, deduction or credit and it was unclear whether they applied to allocations of overall income or loss. Also, the allocation in the partnership agreement was not controlling only if the principal purpose of the allocation was evasion or avoidance of tax. The "substantial economic effect" test had been adopted under Treasury regulations in applying the principal purpose test of prior law.)

Prepaid interest

Under the general rule of section 163(a), a taxpayer using the cash method of accounting can claim a deduction for interest paid within his taxable year. Prior to the 1976 Act, prepaid interest was used in many types of tax shelters to defer tax on ordinary income. In many cases, a deduction for prepaid interest was generated without adverse cash flow consequences by borrowing more than was needed and promptly repaying the excess as "prepaid interest." Under the 1976 Act, if a taxpayer uses the cash method of accounting, interest that is prepaid but that is properly allocable to a later taxable year must be deducted ratably over the period of the loan. This rule applies to all taxpayers (including individuals, corporations, estates, and trusts), and covers interest paid for person-

al, business, or investment purposes. Once prepaid interest has been allocated to the proper periods, such interest is then subject to other applicable limitations (*e.g.*, the limitations on the deduction of investment interest).

Construction-period interest and taxes

Under prior law, amounts paid for interest and taxes attributable to the construction of real property were allowable as current deductions, even if there was no income from the property. The ability to take current deductions for construction-period interest and taxes permitted the deferral of tax on other income. Under the 1976 Act, a taxpayer (other than a corporation that is not an S corporation or a personal holding company) is required to capitalize construction-period interest and taxes attributable to the construction of real property (other than low-income housing). The capitalized expenditures are amortized over a 10-year period. TEFRA extended the scope of the capitalization rule for construction-period interest and taxes to require all corporations to capitalize construction-period interest and taxes attributable to the construction of nonresidential real property.

Original issue discount obligations

Prior to TEFRA, holders of corporate bonds issued at a discount were required to include the total discount in income on a straight-line basis over the life of the bond and corporate issuers were permitted to deduct discount on the same basis. As amended by TEFRA, the original issue discount rules require the income inclusion and deduction at a constant interest rate, i.e., at a compound rate which parallels the manner in which interest would accrue on interest-paying nondiscount bonds. The original issue discount rules were also extended by TEFRA to cover noncorporate obligations other than those issued by individuals.

Stripped-coupon bonds.—Prior to TEFRA, some taxpayers took the position that a disposition of the corpus without the coupons with respect to coupon-bearing bonds resulted in income deferral by allocating the entire cost of the bond to the stripped corpus, producing an artificial loss. The stripped coupons in the hands of a purchaser became capital assets which, if disposed of prior to redemption, could result in capital gain. Under TEFRA, upon a disposition which separates ownership of the bond and the detached coupons, the stripped corpus and detached coupons are treated as obligations issued by a corporation on the date of disposition and are subject to the periodic income inclusion applicable to original issue discount bonds. The basis of the bond is allocated to the components, i.e., the corpus and each coupon, in accordance with their relative fair market values on the date of disposition.

Reorganizations.—Prior to the Technical Corrections Act of 1982, the original issue discount rules did not apply to obligations issued in a corporate reorganization. New obligations issued in exchange for a corporation's outstanding obligations in a recapitalization could provide for the deferral until maturity of payments exceeding both the issue price and the fair market value of the old obligations. Some issuers claimed deductions for interest accruals prior to payment without regard to the limitations applicable to the newly

issued obligations under original issue discount rules. There was no taxable income to cash basis holders until maturity unless they disposed of the bonds earlier. This treatment would result in a substantial mismatching of the holder's income and the deduction under the claimed treatment by the issuer. The original issue discount rules were amended by the Technical Corrections Act to remove the exception for recapitalizations and other tax-free reorganizations.

Audit provisions

In 1982, new audit procedures were enacted for partnerships and S corporations. These provisions are effective for taxable years beginning after 1982. Under these provisions, the tax treatment of partnership and S corporation income, deductions, credits, etc. will be determined administratively and judicially in a single proceeding at the entity level. Partners and shareholders generally must be notified of the proceedings and may participate. The partners and shareholders are bound by the determinations and may not contest the determinations in separate proceedings.

Because these proceedings were not effective for years beginning before 1983, there is no experience as to the effect on tax shelters.

Penalties

Overvaluation penalty.—ERTA provided a graduated addition to tax applicable to certain income tax "valuation overstatements." The addition to tax applies to the extent of any underpayment of income tax attributable to such an overstatement, in the case of a taxpayer who is an individual, a closely held corporation, or a personal service corporation. However, the penalty does not apply with respect to property that has been held by the taxpayer for more than five years.

If there is a valuation overstatement, the following percentages are used to determine the addition to tax:

If the valuation claimed is the following percent of the correct valuation—	The applicable percentage is—
150 percent or more but not more than 200 percent	10
More than 200 percent but not more than 250 percent	20
More than 250 percent	30

The penalty may be waived if the valuation had a reasonable basis or was made in good faith. The penalty is effective for returns filed after December 31, 1981.

Addition to negligence and fraud penalties.—Prior to ERTA, an addition to tax, or penalty, with respect to certain tax underpayments due to negligence or civil fraud, was imposed. That penalty for negligence was 5 percent of any underpayment that is due to negligent or intentional disregard for rules and regulations. The penalty for fraud was 50 percent of any underpayment due to fraud.

ERTA imposed a further nondeductible addition to tax equal to 50 percent of the interest attributable to that portion of an underpayment which is attributable to negligent or intentional disregard

for rules or regulations. TEFRA added a similar further addition to tax in the case of fraud.

Substantial understatement.—Under TEFRA, a penalty of 10 percent will be imposed on any substantial understatement of income tax. For this purpose, an understatement is the excess of the amount of income tax imposed on the taxpayer for the taxable year, over the amount of tax shown on the return. A substantial understatement of income tax exists if the understatement for the taxable year exceeds the greater of 10 percent of the tax required to be shown on the return for the taxable year, and $5,000 ($10,000 for corporations other than S corporations and personal holding companies).

The amount of the understatement will be reduced by the portion of the understatement that is attributable to (1) the treatment of any item for which there is or was substantial authority, or (2) any item for which there was adequate disclosure of the relevant facts on the return. In the case of a tax shelter, the reduction when there is substantial authority will apply only to the portion which the taxpayer believed was more likely than not to be the correct treatment. The disclosure defense is not avoidable in a tax shelter case. A tax shelter is defined as a transaction for which evasion or avoidance of income tax is the principal purpose.

The Secretary may waive all or a part of the penalty on a showing by the taxpayer that there was a reasonable basis for the understatement and the taxpayer acted in good faith. This penalty is in addition to all other penalties provided by law.

The penalty is effective with respect to returns which have a due date after 1982.

Penalty for promoting abusive tax shelters, etc.—Under TEFRA, a new civil penalty was imposed on persons who organize or sell any interest in a partnership or other entity, investment, plan or arrangement, when, in connection with such organization or sale, the person makes or furnishes either (1) a statement, which the person knows or has reason to know is false or fraudulent as to any material matter with respect to the availability of any tax benefit said to be available by reason of participating in the investment, or (2) a gross valuation overstatement as to a material matter which is more than 200 percent of the correct value.

The penalty for promoting an abusive tax shelter is an assessable penalty equal to the greater of $1,000 or 10 percent of the gross income derived, or to be derived, from the activity.

The Secretary is given authority to waive all or part of any penalty resulting from a gross valuation overstatement upon a showing that there was a reasonable basis for the valuation and the valuation was made in good faith. This penalty is in addition to all other penalties provided for by law.

This provision took effect September 4, 1982.

Action to enjoin promoters of abusive tax shelters.—TEFRA permits the United States to seek injunctive relief against any person engaging in conduct subject to the penalty for organizing or selling abusive tax shelters. Venue for these actions generally is the district in which the promoter resides, has his principal place of business, or has engaged in the conduct subject to the promoter penalty.

This provision took effect September 4, 1982.

The IRS has been successful in restraining the promotion of several illegal trust schemes and other illegal tax shelters under these provisions.

ECONOMIC ANALYSIS

Overview

The increase in tax shelter activity has an immediate impact on tax revenue, particularly in the case of "abusive" shelters where the tax write-offs are several times larger than the equity investment. This increases the budget deficit. Furthermore, the proliferation of tax shelter activity may decrease public confidence in the equity of the tax system. In addition, the organization and promotion of tax shelters diverts thousands of lawyers, accountants, and other professionals from other, possibly more productive activities.

Limited Partnership Tax Shelters

Generally speaking, a tax shelter is any investment which results in a mismatch between deductions (or credits) and income, so that the deductions (or credits) "shelter" unrelated income from tax. For purposes of analysis it is useful to distinguish between tax shelter benefits that arise from tax incentives provided by Congress and those that result from the creative use of structural tax rules to accomplish results not intended by Congress. A so-called abusive tax shelter is structured to give the investor larger write-offs than may be warranted under current law or take advantage of uncertainties under the law. Abusive tax shelters may constitute tax evasion rather than avoidance, and sometimes involve fraudulent overvaluation of assets.

Increasingly, the limited partnership form of organization has been used to take advantage of tax shelters. Limited partnerships, like corporations, limit the liability of investors, but unlike corporations, are not subject to the corporate income tax. The income or loss of partnerships is flowed-through and taxed at the partner level. In 1980, partnerships (both limited and general) reported net losses of over $1 billion dollars in six sectors: farming, oil and gas extraction, security and commodity dealers, holding and investment companies, real estate, and business services (including leasing). Table 1 shows that half of the $36.8 billion of business losses claimed by partners is attributable to two sectors: real estate ($11.4 billion) and oil and gas extraction ($7.2 billion).

Table 1. Partnership Income, 1980

[Dollar amounts in billions]

Sector	With Net Income		Without Net Income	
	Number of partnerships (thousand)	Net income	Number of partnerships (thousand)	Net loss
Total	774	$45.062	606	-$36.813
Farms	63	2.239	45	- 1.813
Oil and gas extraction	14	3.577	17	- 7.271
Security/commodity dealers	1	.591	1	- 1.070
Holding/investment companies	92	5.831	69	- 6.876
Real estate	211	8.125	253	-11.412
Leasing and business services	29	1.168	22	- 1.104

Source: Internal Revenue Service, *Statistics of Income—1980, Partnership Returns*, Table 1.

The use of tax-shelter investments by higher bracket taxpayers became increasingly widespread through the 1970s. In 1979, 39 percent of taxpayers with over $200,000 of adjusted gross income (AGI), before partnership loss, reported net partnership losses, which reduced federal income tax liability by 10.7 percent in this income class. Considering just those taxpayers in the top income bracket reporting partnership loss, these losses reduced their tax liability by an average 25.2 percent. On the other hand, only 0.1 percent of taxpayers with pre-loss AGI of $10-$20 thousand reported net partnership loss, and this loss reduced tax liability by only 0.2 percent in this income class.[4]

Limited partnerships serve a variety of legitimate business purposes and are an important source of investment capital in the economy. However, there is growing concern that limited partnerships are being used to market abusive tax shelters to a larger number of taxpayers. In response to this concern, Congess enacted increased penalties for substantial underpayment of tax liability, new penalties for tax shelter promotions, and other compliance measures in the Tax Equity and Fiscal Responsibility Act of 1982.

Why Is Tax Shelter Marketing Increasing?

The continuing growth of tax shelters may appear surprising in view of the enactment of the Economic Recovery Tax Act of 1981, which reduced the top marginal rate from 70 percent to 50 percent, and the enactment of the Tax Equity and Fiscal Responsibility Act of 1982, which was a major effort to broaden the tax base and improve compliance. To understand why tax shelter activity has not abated, it is useful to analyze the market for tax shelters. On the demand side of the market are taxpayers with substantial taxable

[4] These data overestimate tax shelter partnerships to the extent that net partnership losses are due to adverse economic circumstances as opposed to tax deductions. The lowest income class is omitted from Table 2 in order to reduce this source of overestimation.

income confronting high marginal tax rates. On the supply side of the market are users of tax-advantaged assets, such as real property, which during certain periods generate tax deductions in excess of income. The users of tax-shelter assets have an incentive to rent them from a tax shelter partnership, rather than own them, if they cannot take full advantage of the tax deductions because (1) they lack sufficient unrelated income to shelter, or (2) they have low marginal tax rates. Also on the supply side of the market are tax shelter promoters who organize and market limited partnerships interests in tax-shelter assets. The growth of tax shelter marketing is attributable to factors increasing both the supply and demand for tax shelters.

Supply factors

The supply of tax shelters is partly dependent on the ability of asset users to take advantage of the tax write-offs generated by their assets. The combination of the Accelerated Cost Recovery System (ACRS) and debt-financing, particularly in highly leveraged investments such as real estate, can generate tax deductions which are substantially larger than pre-tax income over the early years of the life of the property. It is interesting to note that debt-financing or ACRS alone will not, in general, cause the value of an investment's deductions to exceed the value of its pre-tax income in present value terms. However, in combination, tax deductions can greatly exceed pre-tax income. In these situations it is often difficult for asset users to fully utilize interest and depreciation deductions (and tax credits), which encourages asset users to lease from partnerships, the owners of which are better able to utilize tax write-offs (and credits).

In addition to ACRS, the tax write-off capacity of many asset users was also reduced by the sharp recession in 1981-82, which decreased income. Another factor which continues to reduce tax write-off capacity is high interest rates which squeeze the taxable income of debt-financed businesses. High interest rates also enhance tax shelter benefits which can be obtained by exploiting certain Code provisions that were originally drafted in periods of low interest rates and did not take proper account of the time value of money.

Another factor that may explain the proliferation of abusive tax shelters is the increasing complexity of the tax law, and the backlog of regulations, which appear to be providing more opportunity to take advantage of uncertainty in the tax laws.

Demand factors

The Economic Recovery Tax Act of 1981 (ERTA) reduced the top tax bracket on unearned income from 70 to 50 percent, a reduction of 29 percent, and by 1984 will have reduced other tax rates by 23 percent. This change alone should have decreased the demand for tax shelters since the value of a $100 write-off to a top bracket taxpayer dropped from $70 to $50. The ERTA also expanded eligibility for individual retirement accounts (IRAs) and increased the limitation on contributions to both IRAs and Keogh pension plans. Both of these changes would be expected to reduce taxpayer demand for

marketed tax shelters. In addition, the rapid growth in tax-exempt bond issues would tend to reduce this demand.

On the other hand, an increase in demand for marketed tax shelters could be attributable to a lagged response to the rapid increase in marginal tax rates which occurred prior to the ERTA. Table 2 shows that from 1971 to 1981, the average tax bracket of individual taxpayers rose from 24.0 to 32.1 percent.

Table 2. Average Marginal Income Tax Rates, 1962–1982

Calendar year	Percent [1]
1962	24.9
1963	26.1
1964	22.7
1965	21.8
1966	22.2
1967	22.9
1968 [2]	27.0
1969 [2]	27.5
1970 [2]	24.5
1971	24.0
1972	24.4
1973	25.7
1974	26.2
1975	26.8
1976	27.8
1977	28.7
1979	29.6
1980	31.2
1981	32.1
1982 [3]	29.8

[1] Marginal tax rate (i.e., the rate applicable to the last dollar of income) for all returns, weighted by adjusted gross income.

[2] Includes Vietnam War surtax at 7.5 percent of individual income tax liabilities for calendar year 1968, 10 percent for Calendar Year 1969, and 2.5 percent for Calendar Year 1970.

[3] Data estimated for 1982.

It is likely that taxpayers do not immediately adjust their investment portfolios in response to an increase in their marginal tax rate. It takes time to compare and evaluate investment alternatives, and taxpayers may be cautious about investing in tax-oriented limited partnerships. Finally, the decline in the audit rate, from 2.2 percent of returns in fiscal year 1978 to 1.5 percent of returns in 1983, may have lowered the risk of buying shelters in the minds of some taxpayers.

In conclusion, the recent growth in tax shelter marketing appears to be explained by an overload of deductions and credits in the tax system as a result of the recession, ACRS, and high interest rates; and an increase in taxpayer interest in tax shelters as a lagged response to increasing marginal tax rates prior to 1982.

Approaches to reducing tax shelter marketing

The market for tax shelters can be reduced by policies which operate on the supply or the demand side of the market. There are several demand-side approaches: reducing marginal tax rates and (in the case of abusive tax shelters) increasing enforcement. Lowering the top tax bracket rates reduces the value of tax deductions offered by tax-shelter assets. This reduces the demand for all types of tax shelters. On the other hand, increasing tax enforcement reduces the demand for the more abusive types of tax shelters. Alternatively, a minimum tax can be used to reduce the extent to which any single taxpayer can utilize tax shelters. The present alternative minimum tax covers some, but not all, deductions and credits used in tax shelters and was significantly expanded in 1982. It would be possible to modify the alternative minimum tax further so that it more accurately reflects economic income. Another approach suggested by some is to prevent taxpayers from using investment losses to shelter unrelated income for alternative minimum tax purposes.

One approach to reducing the supply of tax shelters would be to broaden the tax base and, thereby, reduce the excess deductions and credits that encourage users of tax-advantaged assets to lease, rather than own, these assets. This strategy would require an examination of the tax incentives that Congress has enacted over the years. In view of the proliferation of real estate tax shelters, one incentive which might be reviewed is ACRS. For example, a proposed floor amendment to H.R. 4170 to be offered by Congressman Pease and others would increase the recovery period for structures to 20 years from the present 15 years. Other tax preferences could be reduced by extending the 15-percent cutback in corporate preference items enacted in 1982 (section 291) to individuals and, possibly, expanding its scope to cover other preferences or to have a more significant impact on certain of the preferences to which it applies.

A second approach would be to review the structural tax provisions that are being exploited by tax shelters to see if they can be modified in a way that eliminates abuses without harming ordinary business transactions. In this connection, the tax treatment of expenses involved in organizing tax shelters is especially important. Alternatively, special anti-tax shelter provisions could be grafted onto the existing rules (such as the at-risk provisions enacted in 1976).

Recently, there has been considerable interest in broad base income tax proposals with lower and flatter tax rate schedules. These proposals would reduce tax shelter activity on both the supply and demand sides of the market. On the supply side, base broadening reduces the amount of tax-shelter assets offering large deductions. On the demand side, tax rate reductions decrease the value of write-offs to taxpayers. Others favor replacing the income tax with a tax on consumed income, which might reduce the opportunities for tax shelters.

Economic Effects of Tax Shelters

The proliferation of tax shelters has had an important impact on revenues and on the efficiency and equity of the income tax system. The growth of shelters feeds on itself: as the tax base is eroded, rates must be raised to maintain revenues, which in turn increases the demand for tax shelters. This vicious circle threatens the integrity and fairness of the tax system as the tax burden falls increasingly on taxpayers who do not or cannot take advantage of tax shelters. The growth of tax shelters affects the fairness of the tax system in other important respects including shifts in the ownership of certain assets from low-bracket to high-bracket taxpayers. For example, farms are being sold to limited partnerships who can pay more than others due to their superior ability to utilize tax write-offs or their willingness to take more aggressive positions on their tax returns. This may bid up the price of farmland and may force sole proprietors out of agriculture.

Even the tax shelters based on incentives can have important affects on tax equity. For example, the Accelerated Cost Recovery System (ACRS) increased the value of depreciation deductions on rental housing purchased after 1981. This contributed to a construction boom which has glutted the real estate market in several southwestern cities. Post-1981 investors (often limited partnerships) can afford to lower rents or sustain high vacancy rates because of the generous ACRS deductions. However, the income of pre-1981 investors in real estate who rely on the old depreciation rules may have been reduced as rents fell in response to this oversupply. Thus the effect of some tax shelters can be to transfer wealth from existing investors to new investors. In other cases, taxpayers have bid up the price of existing buildings, providing windfalls to the existing owners.

The growth of tax shelters may have had an adverse impact on the efficiency as well as the fairness of the tax system. Tax shelter activity has significantly reduced the tax base over time, which has contributed both to higher deficits and the need for higher tax rates. In addition tax shelter marketing absorbs the talents of thousands of highly skilled professionals who might otherwise be employed in activities which contribute to the growth of GNP rather than the redistribution of the tax burden. Finally, in the case of shelters based on tax incentives, there is evidence that the government has lower cost alternatives than the creation of tax shelters, such as targeted spending programs, for encouraging certain types of economic activity. Tax shelters tend to be inefficient incentive mechanisms as a result of the high organizational and management fees charged by the tax shelter promoters. Tax shelter incentives are also inefficient to the extent that they attract investors taxed at less than the top tax bracket. If investors in the 40-percent bracket are interested in a tax shelter, then the benefit passed through to the users of the assets are determined by the tax benefits of these marginal investors. In this case, however, high-income investors in the 50-percent bracket are receiving a windfall, since

the value of write-offs is 25 percent larger for these upper income investors. Thus, to the extent that these windfalls and organizational fees absorb the tax benefits of an incentive-type shelter, the tax system is an inefficient mechanism for increasing desirable economic activity.

STUDY OF 1982 EFFECTIVE TAX RATES OF SELECTED LARGE U.S. CORPORATIONS

1982 effective tax rates by industry

The corporations included in this study have an average worldwide tax rate of 29.6 percent in 1982, a U.S. tax rate of 16.1 percent, and a foreign tax rate of 55.0 percent (Table 1).

The worldwide tax rates on worldwide income vary widely among industries from negative 2.5 percent for insurance companies to 59.6 percent for rubber companies. Four industries have effective tax rates of less than 10 percent (aerospace, insurance, telecommunications, and railroads).

The telecommunications industry, which has more than 10 percent of total worldwide income and a very low worldwide rate (2.3 percent), has a particularly significant impact on the aggregate rate. This group is dominated by AT&T, which by itself has more than 10 percent of aggregate worldwide income and which has a low effective rate.[1] If just this one company, AT&T, is excluded from the sample, the average worldwide rate for all remaining companies would increase from 29.6 percent to 32.8 percent and the U.S. rate would increase from 16.1 percent to 18.9 percent. There are, of course, other large companies, particularly in the petroleum industry, that have a significant impact on the weighted average rate. But since none of these have an abnormally low rate, they do not, individually, affect the aggregate as much as AT&T.

The unusually high rate of 59.6 percent for rubber companies can be explained partially by the method of aggregation used this year. Companies with a positive tax expense are included in the totals even if they incur a book loss. This method increases the effective tax rate for the group and may result in apparently abnormal rates in any one year; but despite the potential for distortion over a short period, this method provides a better measure of the tax burden for the industry over longer periods of time. If loss companies were excluded from the group, the rubber industry rate would be less unusual, 46.2 percent, rather than 59.6 percent. (The U.S. rate would be 26.9 percent rather than 39.0 percent.) Another reason for the high rates in this group are book losses with no related tax benefit. For example, the effective tax rate for Firestone,

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[1] The California Public Utilities Commission ordered certain utilities, including a subsidiary of AT&T, to pay refunds to consumers, thereby rendering the utilities ineligible for accelerated depreciation and investment tax credits. In December 1982, Congress enacted legislation to clarify the eligibility for these tax benefits and to require tax payments based on amounts refunded to consumers. The net effect of recognizing the reestablished eligibility and the required tax payment was to reduce current tax expense by $885.2 million in 1982. Because of the size and unusual nature of this adjustment, the current tax expense used to compute the effective tax rate excluded this adjustment (i.e., current tax expense as reported was increased by $885.2 million). GTE was also affected by this legislation, but the tax expense was not adjusted because the amount applicable to the current rather than the total provision was not available.

as shown in the annual report, is increased by 104.4 percentage points by such losses.

Insurance companies were included in diversified financials in the 1981 Pease-Dorgan study but are separated into a new group in 1982. This group of companies does not necessarily represent the whole insurance industry, however, for two principal reasons. First, many of the largest insurance companies are mutual, rather than stock, companies which do not publish comparable data. Second, like other industries in this study, the insurance industry is represented by a small sample of companies: five companies that represent less than 15 percent of total companies in the insurance industry based upon asset size.

Not only is the rate computation difficult because of the differences between stock and mutual companies, it is complicated further by differences in types of insurance. Life insurance products are different from property and casualty insurance products, and quite different tax rules apply. For tax purposes, life insurance reserve deductions are based on the discounted value of future claims, whereas property and casualty reserve deductions are taken at the undiscounted cost of future payments. In addition, life companies must treat certain amounts credited to policyholders as being funded proportionately out of taxable and tax-exempt income, whereas property and casualty companies get the full benefit of tax-exempt income. As a result, property and casualty companies tend to generate tax losses which are used to offset the life insurance companies' taxable income in consolidated returns. Furthermore, because many of the largest life insurance companies are mutuals and are therefore excluded from this study, the effective tax rates are more heavily weighted by the property and casualty component of the insurance industry.

The negative current tax provision (a refund due) for the insurance group is due in part to Aetna's and Transamerica's negative provisions for tax. Reasons for the negative provision, as disclosed in Aetna's annual reports, include carrybacks of investment tax credits and capital losses to prior years, and a book adjustment for the taxes of unconsolidated subsidiaries. Consolidation of life insurance taxable income with property and casualty losses contribute to Transamerica's large negative current provision. Thus, even though all life insurance companies paid approximately $2 billion in taxes in 1982, it is not inconsistent that this study reflects a low (or negative) rate due to the effects of consolidation with property and casualty companies, carryovers and the exclusion of mutual companies.

The U.S. income tax rates on U.S. income vary between negative 17.7 percent for chemicals to 39.0 percent for rubber. Seven industries had effective tax rates of less than 10 percent (aerospace, broadcasting, chemicals, financial institutions, insurance, telecommunications, and railroads).

Industries which show a book loss (worldwide and U.S.), for the companies included in the sample, include metal manufacturing, mining, motor vehicles, and airlines. While motor vehicles incurred a book loss, the group had a positive worldwide tax expense, primarily due to substantial foreign tax expense.

The U.S. rates are almost all lower than the worldwide rates—some significantly lower. For example, chemicals have a 47.3 percent worldwide rate but a negative 17.7 percent U.S. rate. Financial institutions have a 24.3 worldwide rate but a negative 3.8 percent U.S. rate. The reasons for the large differences in rates between the worldwide rate and the U.S. rate have not been analyzed for particular industries. However, extensive foreign operations, with the utilization of foreign tax credits, appear to result in a low U.S. rate relative to the worldwide rate. Both the chemical industry and financial institutions derived more than 75 percent of their worldwide income from foreign sources.

Industry groups include companies whose greatest volume of sales lie within that group. Often a company included in one industry group has substantial activities in one or more other groups. Hence the tax rates for an industry reflect the effects of tax rules relating to other, often quite different, industries. For example, Sears is included in the retail industry because more of its sales income is from retailing than from insurance or financial services.[2] But because of the special tax provisions that apply to insurance, Sears' effective tax rate is lower than it would be if Sears were a retailer only. In addition, because Sears is so large, the weighted average for the whole retail group is substantially lower than it would be without Sears' insurance operations. It is not possible, generally, to calculate a separate effective tax rate for separate activities within one company; therefore, we cannot calculate Sears' rate for retailing alone to eliminate the effect of insurance tax provisions on the "retail" rate. But the effective worldwide rate for retailers computed by excluding Sears is 27.1 percent—5.5 percentage points higher than the rate shown (21.6 percent including Sears). The U.S. rate for retailers is 26.1 percent without Sears compared to 20.4 percent with Sears in the group. It seems reasonable to assume that most of the difference in rates is due to Sears' insurance and other activities.

Typically, corporations file a consolidated income tax return with any wholly owned finance subsidiary, even when, under the accounting rules, the finance subsidiary is not included on consolidated financial statements. If a finance subsidiary generates significant tax benefits (e.g., from leasing), the tax expense as reflected in the parent's financial statements may be misleading; the tax expense on the consolidated tax return would be much lower. In this study, equity in the net earnings of wholly owned subsidiaries is eliminated from the parents' income, i.e., neither the income nor tax expense of the subsidiary is included in the tax rate computation. Because this treatment may be misleading in cases where the tax rate for the subsidiary is significantly different from the rate for the parent, it would be desirable to compute a combined rate for the parent and subsidiary. The pre-tax income of the subsidiary would be added to the income of the parent, and the current tax expense of the subsidiary would be added to the tax expense of the parent. The financial statements of the subsidiary are needed, however, to compute this combined rate. A combined rate was computed only

[2] If companies were classified by net income, rather than gross sales, Sears would be classified as an insurance company.

when, from other information, it was clear that the subsidiary generated significant tax benefits, and when the financial statements were available. Thus, a combined rate may not have been computed in all cases where it was appropriate. A combined rate was computed for General Electric (GE) because of the significant tax benefits generated by GE's wholly owned subsidiary, General Electric Credit Corporation (GECC). As a result, GE's worldwide and U.S. rate in 1982 was reduced by over 20 percentage points by including GECC.

U.S. and worldwide tax rates, 1980–1982

Tables 2 and 3 show U.S. and worldwide rates, respectively, for the period 1980 through 1982. There is no consistent pattern of change in the tax rates over the period 1980 through 1982 for all industries. Some industry rates remain fairly constant, such as the financial institutions' worldwide rate (22.5 percent, 24.5 percent, and 24.3 percent for 1980, 1981, and 1982, respectively). The rates for other industries change substantially from year to year. For example, the U.S. rate for chemicals went from 13.7 percent in 1980, to 5.0 percent in 1981, to negative 17.7 percent in 1982.

By aggregating the income and taxes for the 3-year period, the effect of factors which tend to distort the rates in any one year are reduced (e.g., an unusual loss in a large company may distort the aggregate rate in one year, while it may not have a significant effect on the 3-year rate). Three-year rates are not available for all of the industries studied in 1982 because some new industries were added to the study in 1982 and other companies were grouped differently from the prior years. The meaning of such aggregate data, moreover, is obscured by the fact that the tax law was changed, in significant respects, during the 3-year period. Also, different companies were included in the industry group in different years, which could cause the data to present a misleading indication of the true trend.

Of the industries for which data are available, railroads have the lowest worldwide rate of 2 percent for the period 1980-82, and trucking has the highest worldwide rate of 40.9 percent. Paper and wood products have the lowest, and only negative, U.S. rate (3.5 percent) for the 3-year period, while the highest U.S. rate is 40.3 percent for trucking. Five out of the 17 industries for which prior years' data are available had U.S. rates of less than 10 percent (aerospace, chemicals, financial institutions, paper and wood products, and railroads).

Average effective tax rates, 1980–1982

Table 4 shows the average effective tax rates for all companies for 1980, 1981, and 1982. The U.S. rate on U.S. income declined from 21.8 percent in 1980 to 17.2 percent in 1981 and 16.1 percent in 1982. The worldwide rate declined from 34.3 percent in 1980 to 29.6 percent in 1981, but remained at the same level (29.6 percent) in 1982. These data should be interpreted cautiously as indicators of a true trend, since different companies were included in the data for different years.

Tax return vs. annual report tax rates, 1980

The effective tax rates in this study are computed for only a small number of the largest companies in selected industries. Do these rates fairly represent the Federal income tax burden of each industry given the problems in computing effective tax rates from financial statements? In order to shed some light on this question, an effort was made to compare the rates computed in this study with tax return data.

Solely for purposes of determining whether the effective tax rates in this study approximate the actual rate paid by an industry, an effective tax rate was computed for a few industries from the *Corporation Statistics of Income* data for 1980 (the most recent year available). The rate was computed by comparing U.S. tax liability plus foreign taxes paid (a measure of worldwide tax expense) with net income per books plus the provision for Federal income taxes (worldwide income). These rates differ from effective tax rates computed from annual reports in several important respects. Probably the biggest difference is that the tax return measure of "taxes paid" does not reflect any refunds. Another important difference is that net income per books is often not reported on the return, and even if reported is often incorrect.[3] Also, the consolidation rules for tax purposes are different from the accounting rules, so the taxable entity may not be the same as the financial statement entity. The final difference is that rates from income tax returns are computed only for firms with positive after-tax income and positive tax liability.

Table 5 shows a comparison of the effective tax rates based on annual reports with the effective tax rates based on tax return data. Some of the rates computed by the two different methods are remarkably similar. For example, rates which differ by less than 1 percentage point include petroleum and coal products, which have a rate of 43.9 percent on tax returns compared with a 44.7 percent worldwide rate computed from 1980 annual reports.[4] Electric, gas, and sanitary services have a rate of 10.7 percent on tax returns compared with 10.9 percent for gas and electric utilities on financial statements.[5] Instruments and related products have a rate of 41.5 percent on tax returns compared with 40.7 percent in this study.

Several other rates differ by 5 percentage points or less. For example, general merchandise stores have a rate of 31.5 percent on tax returns compared with 30.3 percent for retailers on financial statements; food products' rate is 32.9 percent on tax returns compared with a rate of 37.6 percent for food processors on financial statements; the electric and electronic equipment industry rate is 32.5 percent on tax returns compared with electronics, appliances' rate of 27.5 percent on financial statements.

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[3] Firms that reported zero after-tax book income are excluded.

[4] 1980 rates computed from annual reports are as shown in Table 3.

[5] The Edison Electric Institute prepares a "combined" income statement for over 100 investor-owned electric utilities. Effective tax rates computed from the current tax expense and book income shown on the combined statements are 8.9 percent in 1980, 10.2 percent in 1981, and 13.7 percent in 1982—rates that are all within 2 percent of the rates in this study and the income tax return rate in 1980.

Some rates differ by larger margins. The rate for banking on tax returns is 15.4 percent compared with a 22.5 percent rate for financial institutions (this group includes only commercial banks) on financial statements. The rate for tobacco manufacturers is 45.2 percent on tax returns rather than 29.9 percent on financial statements for the tobacco group in this study.

Any comparison of rates computed for different samples using different methods must be used with caution. Flaws become more apparent when the rates for an industry are quite different under the two methods. For example, paper and allied products have a rate of 29.6 percent computed from the tax return data, but only a 7.0 percent rate computed from annual reports. While this may be due to refunds reflected in the annual report rate but not in the tax return rate, the difference needs explaining—and this is not possible without much more analysis.

Even though this comparison of rates computed from tax return data with rates computed from annual reports is inexact, one industry's tax rate relative to other industries' rates is generally the same under both methods. For example, utilities and banks pay lower rates of tax than the retailers or instrument companies. Thus, the rate computed from tax return data does provide support for the relative industry rates computed from annual reports in this study.

Trends in U.S. corporate taxes as percentage of Government receipts

Effective tax rates in this study are computed for only a small number of large companies, and aggregate rates are only available for 1980, 1981, and 1982. U.S. tax rates for these companies declined over this period. Does this decline in rates represent fairly an overall decline in the corporate Federal income tax burden? In an effort to answer this question, at least partially, the trend in rates based on this study is compared with the trend in corporate taxes as a percentage of Federal Government receipts.

Table 6 shows Federal Government receipts for the period 1950 through 1982 by category—individual, corporate, indirect, and social security—as a percentage of total receipts. Receipts are measured on a national income accounts (NIA) basis, rather than the more usual unified budget basis, because the NIA basis uses accruals of corporate taxes instead of cash payments and is, therefore, more closely comparable to this study. Corporate taxes have declined steadily over the period from 28.3 percent of total receipts in 1950 to only 8.1 percent in 1982. Meanwhile, individual taxes have increased from 39.2 percent in 1950 to 49.0 percent in 1982, and contributions for social insurance have increased more rapidly from 13.1 percent in 1950 to 34.7 percent in 1982. If contributions for social insurance are excluded, receipts from personal taxes are 75 percent, corporate taxes 12.4 percent, and indirect taxes 12.6 percent of the total.

It appears that the decline in the effective rate of the Federal corporate income tax has contributed to the reduced contribution of this tax to total Federal receipts.

Table 1.—Comparison of Corporate Income Tax Rates by Industry, 1982

Industry	Thousands of dollars						Tax rate (percent)		
	U.S. income before tax	Foreign income before tax	Worldwide income before tax	Current U.S. tax expense	Current foreign tax expense	Current worldwide tax expense	U.S. tax rate on U.S. income	Foreign tax rate on foreign income	Worldwide tax rate on worldwide income
Aerospace	2,295,141	416,243	2,711,384	(13,956)	207,505	193,549	(0.6)	49.9	7.1
Beverages	1,590,612	674,107	2,264,719	325,463	327,565	653,028	20.5	48.6	28.8
Broadcasting	784,065	123,101	907,166	69,760	54,472	124,232	8.9	44.2	13.7
Chemicals	1,191,400	3,832,800	5,024,200	(210,800)	2,584,900	2,374,100	(17.7)	67.4	47.3
Computers and office equipment	5,790,319	4,199,219	9,989,538	1,525,913	2,179,158	3,705,071	26.4	51.9	37.1
Construction	335,747	219,682	555,429	53,422	72,093	125,515	15.9	32.8	22.6
Electronics, appliances	4,329,753	1,820,752	6,150,505	617,199	698,067	1,315,266	14.3	38.3	21.4
Financial institutions	1,413,187	4,150,181	5,563,368	(54,137)	1,405,018	1,350,881	(3.8)	33.9	24.3
Food processors	2,412,720	966,581	3,379,301	761,940	469,818	1,231,758	31.6	48.6	36.5
Glass and concrete	(6,490)	201,897	195,407	(35,036)	69,986	34,950	(1)	34.7	17.9
Instruments	2,723,646	960,978	3,684,624	597,515	394,711	992,226	21.9	41.1	26.9
Insurance	1,339,534	32,000	1,371,534	(83,851)	49,161	(34,690)	(6.3)	(1)	(2.5)
Investment companies	1,155,762	531,800	1,687,562	246,512	146,886	393,398	21.3	27.6	23.3
Metal manufacturing	(1,882,979)	70,200	(1,812,779)	(200,793)	70,200	(130,593)	(1)	(1)	(1)
Metal products	458,132	230,096	688,228	138,400	156,270	294,670	30.2	67.9	42.8
Mining	(345,543)	29,007	(316,536)	(43,714)	33,450	(10,264)	(1)	(1)	(1)
Motor vehicles	(1,488,894)	543,967	(944,927)	(289,621)	525,187	235,566	(1)	(1)	(1)
Paper and wood products	301,318	27,887	329,205	108,857	30,900	139,757	36.1	(1)	42.5
Petroleum refining	21,433,352	17,854,717	39,288,069	3,907,484	11,091,783	14,999,267	18.2	62.1	38.2
Pharmaceuticals	1,854,573	1,420,600	3,275,173	606,446	646,997	1,253,443	32.7	45.5	38.3
Retailing	3,418,987	206,761	3,625,748	699,044	85,874	784,918	20.4	41.5	21.6
Rubber	260,645	195,144	455,789	101,569	169,970	271,539	39.0	(1)	59.6
Soaps and cosmetics	1,929,911	578,135	2,508,046	641,835	310,106	951,941	33.3	53.6	38.0
Telecommunications	13,328,971	184,399	13,513,370	211,292	105,723	317,015	1.6	57.3	2.3
Tobacco	2,674,142	687,453	3,361,595	970,884	128,139	1,099,023	36.3	18.6	32.7

Table 1.—Comparison of Corporate Income Tax Rates by Industry, 1982—Continued

Industry	Thousands of dollars						Tax rate (percent)		
	U.S. income before tax	Foreign income before tax	Worldwide income before tax	Current U.S. tax expense	Current foreign tax expense	Current worldwide tax expense	U.S. tax rate on U.S. income	Foreign tax rate on foreign income	Worldwide tax rate on worldwide income
Transportation:	(619,492)	(123,160)	(742,652)	(48,428)	23,034	(25,394)	(1)	(1)	(1)
Airlines	1,689,859	.....	1,689,859	68,523	.....	68,523	4.1	.....	4.1
Railroads	837,646	4,495	842,141	309,310	4,308	313,618	36.9	(1)	37.2
Trucking	5,502,269	.....	5,502,269	859,214	.....	859,214	15.6	.....	15.6
Utilities (electric and gas)	911,570	96,354	1,007,924	329,319	14,019	343,338	36.1	14.5	34.1
Wholesalers	75,619,863	40,135,396	115,755,259	12,169,565	22,055,300	34,224,865	16.1	55.0	29.6
Average, All Companies									

[1] Rate not computed. See Part I: "Methodology—Computation of Tax Rates."

Table 2.—Comparison of U.S. Income Tax Rate on U.S. Income by Industry 1980–82

[In percent]

Industry [1]	1980	1981	1982	1980–82 Average
Aerospace	16.4	6.8	(0.6)	7.7
Beverages	28.0	28.8	20.5	25.1
Chemicals	13.7	5.0	(17.7)	4.3
Computers and office equipment	24.9	25.3	26.4	25.6
Electronics, appliances	24.5	17.1	14.3	18.7
Financial institutions	5.8	2.7	(3.8)	2.7
Food processors	35.6	26.8	31.6	31.2
Instrument companies	37.1	26.6	21.9	28.6
Metal manufacturing	15.3	10.2	[2]	13.0
Paper and wood products	(1.4)	(14.2)	36.1	(3.5)
Petroleum [3]	31.1	21.7	18.2	24.1
Pharmaceuticals	39.2	35.9	32.7	35.6
Retailing	34.1	22.3	20.4	24.8
Tobacco	31.4	31.3	36.3	33.1
Transportation:				
Airlines	3.0	[2]	[2]	[2]
Railroads	10.7	(7.5)	4.1	2.0
Trucking	37.5	46.1	36.9	40.3
Utilities (electric and gas) [4]	10.9	10.3	15.6	12.5

[1] An industry is included in this table only if substantially the same companies are included in the sample each year.

[2] Rate not computed on book loss. See Part I: "Methodology—Computation of Tax Rates."

[3] Some companies included in the 1982 group were classified with crude oil production in 1980 and 1981.

[4] In the 1981 Pease-Dorgan Study, the utilities group included AT&T and GTE. The 1980 and 1981 utilities rates in this study are restated to include only electric and gas utilities.

Table 3.—Comparison of Worldwide Income Tax Rate on Worldwide Income by Industry 1980–82 Average

[In percent]

Industry [1]	1980	1981	1982	1980–82 Average
Aerospace	20.3	12.0	7.1	13.3
Beverages	32.7	33.2	28.8	31.5
Chemicals	30.3	29.2	47.3	35.3
Computers and office equipment	36.9	39.1	37.1	37.6
Electronics, appliances	27.5	24.0	21.4	24.4
Financial institutions	22.5	24.5	24.3	23.7
Food processors	37.6	32.6	36.5	35.5
Instrument companies	40.7	29.4	26.9	32.6
Metal manufacturing	18.5	11.5	([2])	17.6
Paper and wood products	7.0	(8.7)	42.5	3.3
Petroleum [3]	44.7	38.0	38.2	40.6
Pharmaceuticals	41.5	41.3	38.3	40.2
Retailing	35.1	24.5	21.6	26.3
Tobacco	29.9	29.5	32.7	30.7
Transportation:				
Airlines	14.5	([2])	([2])	([2])
Railroads	10.7	(7.5)	4.1	2.0
Trucking	38.4	46.9	37.2	40.9
Utilities (electric and gas) [4]	10.9	10.3	15.6	12.5

[1] An industry is included in this table only if substantially the same companies are included in the sample each year.

[2] Rate not computed on book loss. See Part I: "Methodology—Computation of Tax Rates."

[3] Some companies included in the 1982 group were classified with crude oil production in 1980 and 1981.

[4] In the 1981 Pease-Dorgan Study, the utilities group included AT&T and GTE. The 1980 and 1981 utilities rates in this study are restated to include only electric and gas utilities.

Table 4.—Comparison of Average Effective Corporate Income Tax Rates, 1980–82

[In percent]

	1980 [1]	1981 [1]	1982
U.S. rate on U.S. income	21.8	17.2	16.1
Foreign rate on foreign income	52.0	55.3	55.0
Worldwide rate on worldwide income	34.3	29.6	29.6

[1] Average rates for 1980 and 1981 are computed from total income and expense for the companies included in the 1981 study. To the extent that different aggregation methods were used in 1981 (the 1980 and 1981 industry rates were not restated for purposes of the above average rates), these rates may not be exactly comparable with the 1982 rates. It is unlikely, however, that the change in methodology results in any significant change in the aggregate rates.

Table 5.—Comparison of Effective Worldwide Tax Rates, 1980: Tax Return vs. Annual Report

[In percent]

Industry [1]	Effective worldwide tax rate	
	Tax return basis	Annual report basis
Chemical	33.9	30.3
Electronics, appliances	32.5	27.5
Financial institutions	15.4	22.5
Food processors	32.9	37.6
Instruments	41.5	40.7
Paper and wood products	29.6	7.0
Petroleum	43.9	44.7
Retailers	31.5	35.1
Tobacco	45.2	29.9
Utilities (electric and gas)	10.7	10.9

[1] Industry groups are described in *Corporation Statistics of Income* data as follows: chemicals and allied products, electric and electronic equipment, banking, food and kindred products, instruments and related products, paper and allied products, petroleum (including integrated) and coal products, general merchandise stores, tobacco manufacturers, and electric, gas, and sanitary services.

Table 6.—Federal Government Receipts, 1950–82, by Major Category, as Percent of Total Receipts [1]

Fiscal year	Personal tax and nontax receipts	Corporate profits tax accruals	Indirect business tax and nontax accruals	Contributions for social insurance
1950	39.2	28.3	19.5	13.1
1952	44.2	29.6	14.9	11.2
1954	46.0	26.3	15.8	11.9
1956	44.4	27.9	14.3	13.5
1958	46.5	22.9	14.9	15.7
1960	44.9	23.5	13.9	17.6
1962	45.4	21.8	13.6	19.1
1964	43.9	22.2	13.5	20.4
1966	43.3	23.2	11.7	21.8
1968	44.7	20.7	10.7	24.0
1970	48.2	16.9	9.9	25.0
1972	47.1	16.0	9.3	27.6
1974	45.2	16.0	7.9	31.0
1976	43.6	16.7	7.7	32.1
1978	45.0	16.2	6.6	32.2
1980	47.6	13.3	6.6	32.4
1981	47.5	11.5	9.1	31.9
1982	49.0	8.1	8.2	34.7

[1] Components may not total 100 percent due to rounding.

Source: Based on the Economic Report of the President, 1970 and 1983.

Senator GRASSLEY. If I could have everyone's attention, I would like to start the hearing. And before we have any statements, I would like to say that this is the Subcommittee on Oversight of the IRS of the full Committee on Finance. I'm Senator Chuck Grassley, chairman of the subcommittee.

I would assume that there will not be any other Senators present because the Senate adjourned this morning sometime around 5:30. We made a decision early this morning not to cancel this hearing. I feel up to a few hours of sitting here. I hope the witnesses do as well.

But I did want to take this opportunity to explain the situation here in the Capitol City, as the Senate, last night, finished action on a major tax bill, and has now adjourned for the Easter recess.

Now the hearings that we begin today are potentially—and, hopefully, from my standpoint—of great importance to the United States, to the role of our Nation as an industrial competitor in the world, and then in the end to those people we are most concerned about, the American worker and the taxpayer.

Dramatic changes, of course, as we all realize, have occurred in the social economic conditions in this country and elsewhere in the past few decades. One important change that has taken place in American business and industry and that relates to the fact that according to some measures and to some observers, productivity has fallen in the U.S. economy. By productivity I mean the output per hour in the nonfarm sector.

We are not here today to examine the issue of productivity. Rather, the subcommittee which is charged with oversight of the IRS—is here to begin a searching inquiry to determine whether the Internal Revenue Code has kept pace with the vast changes of the past few years and decades.

Specifically, we want to know how the code affects productivity, and whether the code affects it for the benefit or to the detriment of an improved U.S. economy. The Internal Revenue Code has always played an important role in the conduct of business in this nation. Our corporate leaders and small business people have to make many decisions, many of which are determined by the tax result. Many, if not most, key business decisions are based upon tax consequences. And the higher the rate of taxation the more important the tax factor becomes.

Should an employer enlarge or contract the work force at a critical point in the tax year might be a question raised. Should a manufacturer allow inventory to accumulate or to be depleted? Should an industrial firm obtain capital to construct or purchase new plants or equipment? These and many questions like them are answered by top management and ownership daily in this country, and the answers that they come up with often depend upon research by their corporate personnel as to the tax advantages of disadvantages of certain decisions.

Despite the importance of the Internal Revenue Code, little is understood about its affect on business decisions. Little is understood, in short, about the affect of the code on the productivity of the American worker. Finally, little is understood about the role of the code in the volatile and rapidly changing environment that exists in American business and industry today, an environment

which we know is influenced by technological innovation, worldwide competition, and, of course, many other factors.

The subcommittee hopes that the series of hearings beginning today will provide the Senate and the American people with the kinds of informations, ideas, recommendations and insights that will help us to determine the best tax structure for the coming years.

We may learn that the present system actually inhibits productivity. We may also learn that alternative systems may be available that could greatly stimulate productivity and help to insure America's preeminence in the world economy.

Whatever we learn in these hearings we must be ready to consider fundamentally the many new ways of evaluating these interrelationships, including new ways of taxing the workers and the businesses of this Nation. We must always keep our minds open about the possibility that a new role, difficult though it may be to build, may be in the best interest of this Nation.

This subcommittee is privileged today to hear from 10 distinguished observers of the tax system and the economy. They are drawn from the agencies of the Federal Government, private industry, the financial community and academia. I look forward to hearing from these witnesses.

And at this time, I would like to call our first witness who is the Honorable Charles E. McLure, Deputy Assistant Secretary for Tax Analysis at the Department of Treasury.

I think, Mr. McLure, before you start I would make a couple of administrative decisions. And if any of these decisions I announce causes any problem with anybody, when you come to the witness table, feel free to tell me.

No. 1, we would assume that, as is the usual practice with most subcommittees in the Senate, that your entire statement will be printed in the record unless you ask otherwise. We would ask that you would summarize the points of your testimony in 5 minutes. We would also ask that you be available for questions, questions that I will ask orally today, time permitting. And, second, for members of the subcommittee or full committee who aren't here and obviously can't be here today, we would like to have you be cognizant that it's quite typical for members under those conditions to submit questions in writing, which we hope would be answered in 15 days. And in that same 15-day period of time, the record will be held open so that not only can written responses be given to questions, but there can be any updating of testimony or any correction of testimony that need be done.

We also would give in that same 15-day period of time the opportunity for people who were not invited to testify, but have words of wisdom on this subject before this subcommittee, to submit those words of wisdom in writing and supporting evidence, assuming that it isn't terribly voluminous. We would ask you to keep that to a minimum.

Now, with the announcement of those administrative matters, I would now turn to you, Mr. McLure.

STATEMENT OF MR. CHARLES E. McLURE, Jr., ASSISTANT SECRETARY FOR TAX ANALYSIS, DEPARTMENT OF THE TREASURY, WASHINGTON, DC

Mr. McLURE. Thank you, Mr. Chairman

I welcome this opportunity to discuss with you the relationship between the Federal tax system and productivity. As you know concern for productivity growth is central to the economic program of this administration A resumption of steady increases in our standard of living in the future depends upon continued advances in productivity. Without productivity improvements, increases in social justice become much more difficult to attain and our ability to meet national security and domestic needs is impaired.

In my testimony today, I will review the recent history of U.S. productivity growth, discuss the relationship between tax policy and productivity, point out the progress we have made over the past 4 years in reducing tax impediments to productivity, and indicate where more needs to be done.

In my presentation, I discuss changes in the most commonly used measure of productivity; namely, output or productivity per labor hour. As table 1 indicates, the increase in real output per labor hour in the business sector declined dramatically between 1968 and 1980. The average rate of productivity advance was 3.2 percent per year between 1947 and 1968. It then fell to 2.1 percent in the next 5 years, and dropped to 0.6 percent in the 7 years between 1973 and 1980. Between 1980 and 1983, however, the annual productivity growth rate increased to 1.6 percent.

In order to understand the causes of this disappointing productivity record, it is necessary to examine how the principal determinants of productivity have changed in recent years. The single most important determinant of productivity per labor hour is the quantity of capital, plant and equipment, per worker. The average annual rate of growth and capital per worker was 3.5 percent in the 1948–68 period, declined to 2.9 percent per year in the 1969–73 period, and then declined dramatically to 1.5 percent per year in the 1973–79 period. This decline in the rate of growth of capital per worker was a major factor associated with the slowdown in the rate of increase of productivity per labor hour over the same time period.

Between 1980 and 1982, the growth rate of capital per labor hour increased to an estimated 4.4 percent while productivity growth also increased.

While the capital-labor ratio is a very important determinant of productivity per worker, it is not the only one. Other factors affecting productivity must be cited although their measurement and, thus, contribution to productivity are far more difficult to define or quantify.

The age-sex mix of the labor force began to change significantly in the midsixties when a large number of relatively unskilled or inexperienced people entered the labor force. The increase in new entrants to the labor force resulted from both the large influx of young workers due to the post-war baby boom, and the rapid growth in labor force participation of women.

Government mandated regulations increased dramatically during the 1970's. Since improvements in environmental quality and safety brought about by regulations are not counted in measured output, regulations result in a decline in measured productivity. In addition, some regulatory policies were poorly designed and imposed unnecessarily high costs on the private sector.

The dramatic increases in energy prices since 1973 has undoubtedly had a significant effect on productivity growth. The increase in energy prices greatly reduced the value of capital, designed to use relatively high-cost energy supplies, and thus adversely affected the effective capital-labor ratio.

Advances in technological knowledge are also important determinants of productivity change. Serious deficiencies in our indicators of the technological knowledge exists, but there appears to be a consensus that part of the slowdown in the growth of productivity is attributable to a decline in the rate of increase of our stock of knowledge.

In significant part, the implementation of technical advances requires that technological improvement be embodied in new capital. An overall decline in the rate of capital formation, therefore, may be associated with a slowdown in the advance of applied technology.

Short-run cyclical variations also have an impact on productivity growth. The rate of productivity growth tends to decline during recessions and to accelerate during recoveries. In addition, cyclical variations may themselves reduce capital growth by increasing the risk premium required to attract equity investment.

Changes in both the level and structure of taxation can have significant effects on the level and growth rate of productivity. The overall level of taxation is important for a very basic reason. High tax rates discourage saving and investment, invention and innovation, and work effort, causing total output to be depressed. In the long run, the burden of taxation can be controlled only by controlling the growth of Federal expenditures. In the remainder of my remarks today, I will focus on the relationship between the tax structure and productivity.

It is widely rccognized that high tax rates adversely affect incentives to produce by reducing after tax rewards for working and saving and for innovative activity. It may be less well known that taxation also reduces productivity when it interferes with allocative decisions made in response to market signals. To the extent taxes can be made more neutral among alternative ways of earning and spending incomes, decisions of workers, savers, businesses, and consumers can be made more responsive to price signals that reflect the real social productivity of alternative activities, and less responsive to considerations of tax minimization.

Major changes in tax policy since 1981 have been reduction in marginal rates and indexation of exemptions and rate brackets to prevent erosion of tax rate reductions by inflation, the accelerated cost recovery system, additional tax incentives for private saving, and for research and development, and enactment of provisions to improve compliance and restrict tax shelters.

The tax cuts in the Economic Recovery Act of 1981 were the first significant reductions in marginal tax rates since the Revenue Act

of 1964. During the intervening period, marginal income tax rates confronted by most taxpayers increased significantly. For example, a four-person, one-earner family with the median income confronted a marginal income tax rate of about 18 percent in 1965, but about 26 percent in 1980. ERTA lowered the top marginal rate from 70 to 50 percent and reduced other marginal tax rates by roughly 23 percent over a 3-year period.

In addition, ERTA provided that beginning in 1985 personal exemptions, the zero bracket amount and the limits of tax rate brackets will increase in proportion to increases in the Consumer Price Index. Indexation will prevent inflation from eroding the effects of the ERTA tax rate cuts by moving individuals without increases in real income into higher marginal tax rate brackets.

Lower marginal tax rates help productivity in a number of ways. Besides improving overall incentives, lower marginal tax rates reduce the relative advantage of tax preferred investments. If shelters are less attractive, social returns, as indicated by pretax profitability, rise relative to tax avoidance as a determinant of investment. Lower marginal tax rates can also have important effects on labor supply; particularly, for second earners. ERTA directly reduced the work disincentive for second earners by allowing married couples an exclusion equal to 10 percent of the earnings of the lower earning spouse, up to a maximum exclusion of $3,000.

Lower marginal tax rates may also improve the intensity of work effort, reduce tax distortion of occupational choice, and reduce incentives to avoid tax by participating in the underground economy. All of these improve productivity by improving the effectiveness of work effort.

The extent to which lower marginal tax rates increased the proportion of income that is saved is not known with certainty. The reduction of the top rates from 70 to 50 percent, however, along with the associated reduction of the top rate on long-term capital gains from 28 to 20 percent significantly reduced a major impediment to saving and capital formation.

In the latter part of the 1970's, the increase in the rate of inflation significantly increased real effective tax rates on returns from depreciable capital. Inflation increases real effective tax rates on depreciable assets in any system in which depreciation deductions for tax purposes depend on the historical cost of assets without adjustments for price level changes. The accelerated cost recovery system enacted in ERTA provided for a significant acceleration of depreciation deductions for business machinery and for equipment and structures. This greatly reduced real, effective tax rates on the return to business fixed investments.

The reduced taxation of business capital has lowered the cost of capital to capital-intensive industries, reduced the tax bias favoring capital in the household sector over capital used by business, and increased incentives to invest in more durable capital. All these changes should have beneficial effects on the growth of productivity in future years.

ERTA also included a number of other incentives for saving and capital formation, among them the extended availability of tax for individual retirement accounts, and a provision to exclude from

taxable income 15 percent of net interest income received by individuals beginning in 1985.

ERTA also included a new tax credit for research and experimentation. The R&E credit provides a broad-based incentive for innovative activity without involving the Federal Government directly in the choice of which industries to assist.

The administration has also supported and Congress has enacted important provisions to reduce the use of tax shelters and improve compliance. These provisions protect the revenue base by assuring that people pay the taxes they owe and by limiting the ability of individuals and corporations to exploit inconsistencies in the tax laws to reduce their tax liability.

Improved compliance and the closing of loopholes can enhance productivity by making possible lower tax rates for everyone.

While the changes in tax policy enacted during this administration have created a tax structure that is much more favorable to productivity and long run economic growth, much more still needs to be done. In his state of the Union message, the President directed the Department of the Treasury to develop by December 1984 a plan to reform and simplify the tax system to make it more fair and more neutral.

While I cannot prejudge the outcome of the tax reform study, I can say that the plan we will develop will have as its objective the lowering of tax rates and the broadening of the tax base. Broadening the base would require eliminating many of the special exclusions and exemptions, deductions and credits that have made the current system unfair, complex, and distortionary.

A reformed tax system that no longer discriminates among ways of earning and spending money would be simpler and fairer and would encourage taxpayers to make better use of the economy's scarce resources. As a result, a better and more neutral tax system can contribute significantly to improved productivity in the coming years.

Thank you.

Senator GRASSLEY. I want to thank you very much.

[The prepared statement of Mr. McLure follows:]

For Release Upon Delivery
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Friday, April 13, 1984

STATEMENT OF CHARLES E. McLURE, Jr.
DEPUTY ASSISTANT SECRETARY FOR TAX ANALYSIS
BEFORE THE
OVERSIGHT SUBCOMMITTEE
OF THE
SENATE FINANCE COMMITTEE
April 13, 1984

Mr. Chairman and Members of the Subcommittee:

I welcome this opportunity to discuss with you the relationship between the Federal tax system and productivity.

As you know, concern for productivity growth is central to the economic program of this Administration. A resumption of steady increases in our standard of living in the future depends upon continued advances in productivity. Without productivity improvements, increases in social justice become much more difficult to attain and our ability to meet national security and domestic needs is impaired.

In my testimony today, I will review the recent history of U.S. productivity growth, discuss the relationship between tax policy and productivity, point out the progress we have made over the past four years in reducing tax impediments to productivity, and indicate areas where more needs to be done.

R-2635

Post-War Productivity Growth

Aggregate Productivity Change

In my presentation today, I discuss changes in the most commonly used measure of productivity, namely, output or productivity per labor hour. As Table 1 indicates, the increase in real output per labor hour in the business sector declined dramatically between 1968 and 1980. The average rate of productivity advance was 3.2 percent per year between 1947 and 1968; it then fell to 2.1 percent in the next five years and dropped to 0.6 percent in the seven years between 1973 and 1980. Between 1980 and 1983, however, the annual productivity growth rate increased to 1.6 percent. If the agricultural sector is excluded from these numbers, the productivity picture is slightly less favorable. In the 1947-68 period nonfarm business productivity rose at an annual average of 2.7 percent; the growth rate then slowed to 1.9 percent per year during the 1968-73 period and became 0.5 percent per year during the 1973 to 1980 period, but rose to 1.6 percent per year between 1980 and 1983.

Table 1
Changes in Aggregate
Real Output per Hour
(percent change, annual rate)

	1947-68	1968-73	1973-80	1980-83
Business sector	3.2	2.1	0.6	1.6
Nonfarm business	2.7	1.9	0.5	1.6

Source: Economic Report of the President, February 1984, Tables B-40 and B-41.

Comparative Trends Among Sectors

Table 2 shows productivity growth of the major sectors of the economy between 1948 and 1982. The data in Table 2 show that, although the overall decline in productivity after 1968 was quite broad, it varied greatly among industrial sectors with some sectors experiencing gains in productivity growth. Between 1973 and 1979, the decline in productivity growth accelerated dramatically, except in communications and finance. In contrast, the productivity growth rate increased between 1979 and 1982.

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In two sectors, construction and mining, productivity per manhour not only did not increase between 1973 and 1979, but actually declined during that period. In mining, the decline in output per manhour was an average of 5.2 percent per year for the 1973-1979 period; in construction, the decline in labor productivity started in the 1968-73 period (-1.8 percent per year) and accelerated during the 1973-79 period (-2.8 percent per year). In several other sectors, e.g., wholesale and retail trade, services, and finance, insurance and real estate, the rise in output per manhour during the years 1973-79 averaged less than 1 percent per year. In both services and manufacturing, some acceleration of productivity advance occurred in the years 1968-1973, compared with the prior two decades.

Declines in productivity growth rates are not closely associated with capital intensity. As can be seen through a comparison of Tables 2 and 3 some sectors, e.g., mining, finance, insurance and real estate, have a high level of output per worker reflecting a relatively large stock of capital per worker, but the growth in productivity has been slower than average during one or more periods. In other sectors with low levels of output per labor hour (e.g., construction, retail trade, and services), productivity growth has been slow. Similarly, productivity growth has been faster than average in both agriculture, which has a low level of output per labor hour, and in communications, which has a high level of output per labor hour.

Causes of Productivity Slowdown

Decline in Capital-Labor Ratio

In order to understand the causes for this disapppointing productivity record, it is necessary to examine how the principal determinants of productivity have changed in recent years. The single most important determinant of productivity per labor hour is the quantity of capital--plant and equipment--per worker. Accordingly, other things being equal, when the amount of capital grows more rapidly than the amount of labor, productivity per worker and real wages increase. Conversely, when the amount of capital grows more slowly than the growth in labor input into production, the productivity of labor and real wages decrease.

The average annual rate of growth in capital per worker -- defined as the ratio of the net stock of fixed private non-residential capital to labor hours engaged in production -- was 3.5 percent in the 1948-1968 period, declined to 2.9 percent per year in the 1968-1973 period, and then declined

dramatically to 1.5 percent per year in the 1973-1979 period. This decline in the rate of growth of capital per worker was a major factor associated with the slowdown in the rate of increase in productivity per labor hour over the same time period. Between 1980 and 1982 the growth rate of capital per labor hour increased to an estimated 4.4 percent, while productivity growth also increased.

The decline in growth of the capital-labor ratio between 1968 and 1979 reflected both a significant decrease in the growth rate of the net capital stock over the period (from 4.3 percent per year in 1948-1973 to 3.4 percent in the 1973-79 period) and a dramatic increase in the growth rate of hours worked during the 1973-1979 period to 1.9 percent annually compared with 0.7 percent from 1948-1968 and 1.5 percent between 1968 and 1973.

The decline in the rate of growth of capital occurred even though the share of nonresidential fixed investment, including outlays for pollution abatement, in real GNP did not change dramatically during the post-World War II period. During the 1948-68 period non-residential fixed investment averaged 9.4 percent of GNP, during 1969-73 about 10.5 percent of GNP, and during the 1974-80 period it increased slightly to 10.6 percent of GNP. During this Administration (1981-83), the share of nonresidential fixed investment in real GNP increased further to an average of 11.2 percent.

Even though total nonresidential investment remained relatively unchanged as a share of GNP, net investment, which represents additions to the stock of capital, after allowance for capital consumption, declined as a fraction of GNP. Net fixed non-residential investment averaged 38.6 percent of gross fixed non-residential investment in the five years after the 1964 tax cut (1964-1968). This ratio fell to 33.5 percent during the following 5 years and fell further to 26.6 percent over the 1974-81 period.

Other Determinants of Productivity Growth

While the capital-labor ratio is a very important determinant of productivity per worker, it is not the only one. It is, however, the one that is most readily measured and quantified. Other factors affecting productivity must be cited although their measurement and, thus, contribution to productivity are far more difficult to define or quantify. While students of the subject may arrive at similar lists of the causes of the decline in productivity growth, there does not appear to be firm agreement as to the relative importance of each of the causes. Thus, the best one can do, given the current state of knowledge on the

subject, is to identify these factors and suggest how they might have affected changes in productivity growth in recent years.

o The age-sex mix of the labor force began to change significantly in the mid-sixties when a large number of relatively unskilled or inexperienced people entered the labor force. The increase in new entrants to the labor force resulted from both the large influx of young workers born in the post-war "baby boom" and the rapid growth in labor force participation of women. Youths between the age of 16 and 24 comprised 21.5 percent of the labor force in 1970 and 23.5 percent in 1980. Similarly, the proportion of women in the labor force increased from 38.1 percent to 42.6 percent between 1970 and 1980. Since the official productivity data are not adjusted for changes in the composition of the labor force, the significant influx of inexperienced workers into the labor force and especially into low productivity industries contributed to the measured decline in productivity growth. The productivity slowdown from this source should be reversed in the future as the postwar "baby boom" generation and new female entrants to the labor force gain more experience.

o Shifts in capital and labor from agriculture to other sectors contributed significantly to productivity growth during the first two decades after World War II, since the marginal productivities of capital and labor in nonfarm employment were higher than in farm employment. The shift from agriculture to other sectors essentially ended at the beginning of the 1970's, resulting in the removal of an important source of productivity growth.

o Government-mandated regulations increased dramatically during the 1970's. Since improvements in environmental quality and safety brought about by regulations are not counted in measured output, regulations result in a decline in measured productivity. In addition, some regulatory policies were poorly designed and imposed unnecessarily high costs on the private sector. A major component of the Administration's economic policy has been to eliminate unnecessary regulations while maintaining a commitment to promote health, safety, and environmental quality.

A sector often cited as one in which productivity fell in response to mandated regulations is mining. As noted earlier, productivity in the mining sector declined sharply during the period 1973-1979. This measured decline in productivity growth, however, does not take account of improvements in worker safety, air quality, and water quality attributable to regulation.

o The dramatic increase in energy prices since 1973 has undoubtedly had a significant effect on productivity growth. The increase in energy prices greatly reduced the value of capital designed to use relatively high-cost energy supplies and, thus, adversely affected the effective capital-labor ratio. Further, to the extent that capital and energy are complements in production, increases in energy prices tend to deter capital formation and result in a substitution of labor for capital, thereby reducing measured labor productivity growth.

While there is general agreement among students of the subject that rising energy prices contributed to the decline in productivity growth, there is little agreement regarding the magnitude of the effect. It is interesting to note, however, that all major industrialized countries experienced a significant decline in productivity growth after 1973. This suggests that the impact of higher energy costs was significant, even though we are unable to measure this effect directly.

o Advances in technological knowledge are also important determinants of productivity change. Despite their recognized importance, well agreed-upon measures of investment in the stock of knowledge, analogous to measures of investment in physical capital, are not available. Investigators of the subject have attempted to measure investment in knowledge using data on expenditures on research and development, employment in research and development, and the issuance of patents. All of these measures have serious deficiencies as indicators of technological knowledge. Nevertheless, there appears to be a consensus that part of the slowdown in the growth in productivity is attributable to a decline in the rate of increase of our stock of knowledge.

In significant part, the implementation of technical advances through improved production methodologies requires capital formation. Often technological improvements are embodied in new capital. An overall decline in the rate of capital formation, therefore, may be associated with a slowdown in the advance of applied technology, for a given level of technological knowhow.

o Short-run cyclical variations have an impact on productivity growth. The rate of productivity growth tends to decline during recessions and to accelerate during recoveries as business adjusts the use of labor and capital relative to output and sales, because percentage changes in output tend to exceed percentage changes in the use of labor services.

In addition, cyclical variations may themselves reduce capital growth by increasing the risk premium required to attract equity investment. Over the past decade, there were three recessions as compared with four recessions during the 20 previous years. Similarly, the rate of inflation has also varied greatly in recent years, adding another source of uncertainty for investment planners. The annual growth rate of the consumer price index increased from less than two percent in the early 1960's to over 13 percent in 1980, and then declined to less than 4 percent in 1982 and 1983.

Whatever the relative contribution of the other factors to the retardation of productivity advance, the sharp decrease in the capital-labor ratio must be deemed to be a principal cause. While no one factor fully explains the decline in growth in the net stock of capital in relation to the growth in labor between 1968 and 1980, it is clear that tax policy changes have had an important effect on overall investment incentives. In the remainder of my remarks, I will discuss the relationship between tax policy and productivity.

Role of Federal Tax Policy

Changes in both the level and structure of taxation can have significant effects on the level and growth rate of productivity. I will comment in general on how taxation affects productivity, discuss the effects of the President's tax program on productivity, and then indicate in general terms how the more fundamental reform of the tax system currently being studied by the Treasury Department could reduce remaining tax impediments to productivity.

Level of Taxation

The overall level of taxation is important for a very basic reason. High tax rates discourage saving and investment, invention and innovation, and work effort, causing total output to be depressed. In the long run, the burden of taxation can be controlled only by controlling the growth of Federal expenditures. In the remainder of my remarks today, I will focus on the relationship between the tax structure and productivity.

Tax Structure

The Federal tax structure affects the productivity of the American economy in a wide variety of ways. It influences the supply of labor, the savings and investment behavior of households and firms, the international allocation of capital, the efficiency of utilization of whatever labor and capital resources are available at any time, and the rate of invention and innovation.

It is widely recognized that, in general, taxes adversely affect incentives to produce by reducing after-tax rewards for working and saving. To encourage productivity growth, it is particularly important to avoid excessively high tax rates on returns from saving and capital investment generally and from invention and innovative activity in particular.

It may be less well-known that taxation also reduces productivity when it interferes with allocative decisions made in response to market signals. These adverse allocative effects of taxation can be minimized to the extent taxes can be made more neutral among alternative ways of earning and spending incomes. By making the tax system more neutral, decisions of workers, savers, and consumers can be made more responsive to price signals that reflect the real social productivity of alternative activities and less responsive to considerations of tax minimization.

The Administration's Tax Program

The Administration's program to increase long-term economic growth, announced in February, 1981, has four major elements: 1) reduction in the growth rate of Federal spending, 2) a regulatory reform program, 3) a non-inflationary monetary policy, and 4) changes in tax policy designed to restore incentives for work and saving. In line with this general policy, the major changes in tax policy since 1981 have been 1) reduction in marginal tax rates and indexation of exemptions and rate brackets to prevent erosion of tax rate reductions by inflation, 2) the accelerated cost recovery system (ACRS), 3) additional tax incentives for private saving and for research and development, and 4) enactment of provisions to improve compliance and restrict tax shelters.

Reduction in Marginal Tax Rates and Indexation

The Economic Recovery Tax Act of 1981 (ERTA) lowered the top marginal tax rate from 70 percent to 50 percent and reduced other marginal tax rates by 23 percent over a three year period. In addition, ERTA provided that, beginning in 1985, personal exemptions, the zero bracket amount, and the limits of tax rate brackets will increase in proportion to increases in the consumer price index. This indexation of the exemptions and tax brackets will prevent inflation from eroding the effects of the ERTA tax rate cuts by moving individuals without increases in real income into higher marginal tax rate brackets.

The tax cuts in ERTA were the first significant reductions in marginal tax rates since the Revenue Act of 1964. During the intervening period, although a number of tax reductions were enacted, marginal income tax rates confronted by most taxpayers increased significantly. For example, a four person, one earner family with the median income confronted a marginal income tax rate of about 18 percent in 1965, but about 26 percent in 1980. ERTA reversed the trend towards higher marginal tax rates, and indexing will help to prevent erosion of the ERTA rate cuts.

Over the long run, lower marginal tax rates help productivity in two ways. First, lower marginal tax rates improve overall incentives for working and saving. Second, lower marginal tax rates reduce the relative advantage of tax-preferred investments, making tax shelters less attractive. As a result, the importance of social returns, as indicated by pretax profitability, rises relative to the importance of tax avoidance considerations.

Lower marginal tax rates can have important effects on labor supply, particularly for second earners in families who must pay a high marginal tax rate, determined by the income of the primary earner, on their first dollar of wage income. A number of empirical studies have shown that the labor supply decisions of married women are quite sensitive to changes in after-tax wages. In addition to the overall reduction in marginal tax rates, ERTA directly reduced the work disincentive for second earners by allowing married couples an exclusion equal to 10 percent of the earnings of the lower earning spouse, up to a maximum exclusion of $3,000.

Marginal tax rates may also influence other components of labor supply, including intensity of work effort and occupational choice. The latter is affected because, with high marginal tax rates on money income, people are induced to choose occupations in which rewards come more in the form of pleasant working conditions, shorter hours, or tax-free fringe benefits. In addition, lower marginal tax rates reduce the incentive to participate in the underground economy, where productivity may be less than in the regular economy. Improvements in the intensity of work effort, reduction in tax distortion of occupational choice, and reduction of incentives to avoid tax by participating in the underground economy all improve productivity by improving the effectiveness of work effort.

The extent to which lower marginal tax rates increase the proportion of income that is saved is not known with certainty. The reduction in the top rate from 70 to 50

percent, however, along with the associated reduction in the top rate on long-term capital gains from 28 percent to 20 percent, significantly increased the after-tax return available on a large share of the stock of private savings and thus reduced a major potential impediment to savings and capital formation.

Accelerated Cost Recovery System (ACRS)

The accelerated cost recovery system (ACRS), enacted in ERTA, provided for a significant acceleration of depreciation deductions for business machinery and for equipment and structures. This greatly reduced real effective tax rates on the return to business fixed investment. One purpose of ACRS was to stimulate business capital formation, thereby increasing capital per worker and productivity.

In the latter part of the 1970's, the increase in the rate of inflation significantly increased real effective tax rates on returns from depreciable capital. Inflation increases real effective tax rates on depreciable assets in any system in which depreciation deductions for tax purposes depend on the historical cost of assets, without adjustments for price level changes. Depreciation deductions can be made fully inflation-proof either by allowing the depreciable basis of assets to be increased in proportion to increases in the overall price level or by allowing the entire capital recovery deduction to be taken in the year the asset is purchased or placed in service.

ACRS maintained the current system of basing depreciation deductions on the historical costs of assets, without explicit adjustments for inflation, but compensated roughly for the effects of inflation by allowing deductions to be accelerated. In 1982, the rate of inflation was much lower than had been anticipated when ERTA was enacted. At the lower inflation rates prevailing since 1982, ACRS as originally enacted, including the investment tax credit, was more generous than expensing for investments in machinery and equipment; equivalently, it provided negative real effective tax rates on returns from these investments. As a result, the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) scaled back the benefits of ACRS by eliminating the further acceleration of deductions scheduled to go into effect in 1985 and 1986 and by requiring a reduction in the depreciable basis equal to one half of the investment tax credit.

The net combined effect of ERTA, TEFRA, and the decline in the rate of inflation has been to reduce greatly the real

effective tax rate on the return to capital investment. The changes in taxation of business capital have lowered costs of capital to capital-intensive industries, reduced the tax bias favoring capital in the household sector over capital used by business, and increased incentives to invest in more durable capital. All of these changes should have beneficial effects on the growth of productivity in future years. In fact, real business fixed investment has grown 12.6 percent in the first four quarters of the current recovery, compared to an average of 5.7 percent in the first year of five previous recoveries between 1954 and 1975.

Other Savings and Capital Formation Incentives

ERTA also included a number of other incentives to improve savings and capital formation. The improved savings incentives include the expanded availability of tax-free individual retirement accounts (IRAs) and a provision to exclude from taxable income 15 percent of net interest income received by individuals, beginning in 1985. ERTA also included a new tax credit for research and experimentation (R&E credit) to encourage innovative activity. The R&E credit is equal to 25 percent of the increase in qualified research and experimentation expenditures over the average level of the preceeding three years. The R&E credit provides a broad-based incentive for innovative activity without involving the Federal government directly in the choice of which industries to assist.

Tax Shelters and Compliance

The Administration has also supported, and Congress has enacted, important provisions to reduce the use of tax shelters and improve compliance. These provisions serve the important goal of protecting the revenue base by assuring that people pay the taxes they owe and by limiting the ability of individuals and corporations to exploit inconsistencies in the tax law to reduce their tax liability without changing economic behavior. Improved compliance provisions and the closing of loopholes can enhance productivity in the long run by making possible lower tax rates for everyone, and thus limiting the damage to private incentives by the tax system.

Examples of compliance and loophole-closing provisions enacted under this Administration include the tip compliance provisions in TEFRA, backup withholding on interest and dividends, and the restrictions on commodity straddles enacted in ERTA and expanded in TEFRA. In addition, the Administration's budget for FY 1985 includes a number of

important provisions to curb corporate, tax shelter, and accounting abuses, as well as other provisions to restrict tax avoidance, including limitations on sale-leasebacks of depreciable property to tax-exempt organizations and limitations on private purpose industrial development bonds.

A number of these provisions are included in currently pending bills that have been approved by the House and by the Senate Finance Committee.

Fundamental Tax Reform

While the changes in tax policy enacted during this Administration have created a tax structure that is much more favorable to productivity and long-term economic growth, much more still needs to be done. In his State of the Union message, the President directed the Department of the Treasury to develop by December, 1984 a plan to reform and simplify the tax system. We in the Treasury Department have been examining ways to make fundamental changes in our current tax system for several years and will be intensifying our efforts in the coming months.

Despite the reduction in marginal tax rates and the improved incentives for capital formation that have been enacted in recent years, the tax system still imposes major, unneeded barriers to productivity. Because of preferential treatment of various economic activities, we have a tax system where individuals or families of equal means pay quite different amounts of tax, depending on how they earn or use their incomes. In addition, the amount of tax paid by business firms with equal before-tax incomes varies considerably, depending on the assets the firm invests in, the form of organization of the business, the size of the business, the economic activity the business is engaged in, and the way the business is financed.

The availability of so many selective preferences erodes the tax base. Besides introducing substantial inequities and distortions, this means that tax rates have to be high to raise revenue. These high rates limit incentives to work, save and invest, and innovate. In addition, because of differences in effective tax rates among economic activities, scarce capital is attracted to tax-favored investments rather to those investments with the highest productivity. In extreme cases, investments can flow into activities with little or no social benefit. This misallocation of capital equipment is equivalent to letting part of the capital stock stand idle.

While I cannot pre-judge the outcome of this study, I can say that we will be looking at all aspects of the Federal tax system. The plan we will develop will have as its objective the lowering of tax rates and broadening of the tax base. Broadening the base would require eliminating many of the special exclusions, exemptions, deductions and credits that have made the current system unfair, complex, and distortionary. The objective of the study is not to raise revenues, except to the extent that closing loopholes and lowering tax rates encourages economic efficiency and growth, thereby raising employment and income, or induces people to move into the regular economy and report some of the income now flowing through the underground economy.

A reformed tax system that no longer discriminates among ways of earning and spending money would be simpler and fairer and would encourage taxpayers to make better use of the economy's scarce resources. As a result, a better and more neutral tax system can contribute significantly to improved productivity in the coming years.

Table 2

Growth in Productivity
by Industry Grouping
(percent change, annual rate)

Industry	1948-68	1968-73	1973-79	1979-82
Agriculture, forestry, fisheries	4.8	3.0	2.5	6.3
Construction	2.7	-1.8	-2.8	-0.5
Mining	4.5	1.0	-5.2	-3.7
Transportation	2.4	2.3	1.2	-2.4
Communication	5.4	4.3	6.0	3.5
Utilities	6.2	2.6	1.0	-1.6
Wholesale trade	3.3	2.8	0.5	-0.2
Retail trade	2.7	1.9	0.8	0.4
Finance, insurance, real estate	1.9	0.6	0.6	0.3
Services	1.3	1.4	0.4	1.0
Manufacturing	2.9	3.9	1.5	2.2
Durable	2.6	3.0	1.5	2.1
Nondurable	3.1	5.1	1.7	2.2

Source: Gross Product Originating (GPO) by Industry divided by hours worked (table 6.2 and 6.13, National Income Accounts).

Note: Labor data are based on hours worked. The 1979-82 figures estimated from hours paid as hours worked are not available for detailed industries after 1979.

Table 3

Output Per Manhour
(1972 dollars per hour)

Industry	1948	1968	1973	1979	1982
Agriculture, forestry, fisheries	1.49	3.78	4.38	5.08	6.11
Construction	4.15	7.02	6.41	5.40	5.32
Mining	5.74	13.77	14.46	10.48	9.36
Transportation	4.68	7.47	8.36	9.00	8.38
Communication	4.17	11.86	14.05	20.76	23.03
Utilities	5.65	18.69	21.21	22.47	21.38
Wholesale trade	4.38	8.32	9.55	9.85	9.80
Retail trade	2.73	4.61	5.06	5.32	5.39
Finance, insurance, real estate	14.97	21.74	22.41	23.19	23.39
Services	3.63	4.73	5.06	5.18	5.33
Manufacturing	3.87	6.80	8.23	9.02	9.62
Durable	4.25	7.11	8.27	9.00	9.57
Nondurable	3.43	6.36	8.17	9.05	9.66

Source: See Table 2.

Senator GRASSLEY. I guess before I would ask you a question, I would issue a challenge. Not necessarily to you, but through you to the administration that I hope they follow through on the plan that's due in December 1984 to reform and simplify the tax system. But also to remind that the last President also made such a promise in 1976, and didn't deliver on it. I would hope that we as Republicans, have that opportunity.

My first question is how would you describe a consumption tax, and would it be a single rate tax?

Mr. MCLURE. The term "consumption tax" can be used in at least two ways. One way would simply be to use that term to describe a general sales tax such as a retail sales tax or value added tax.

A second use of the same term is what we might call a personal consumption tax or tax on consumed income. And that tax differs from the present income tax in that the saving is excluded from the tax base, but net borrowing is included. It resembles the present tax system in that it is levied on the individual taxpayer rather than on transactions. And as a result, it can be geared to the personal circumstances of the taxpayer rather than simply being levied at a given rate on goods and services.

The tax could be levied at a flat rate, but it need not be flat. The rate could be graduated just as our present income tax rates are graduated.

Senator GRASSLEY. Taking off from the points that you made about the ACRS and its impact upon productivity, I have a question about whether depreciation should be geared to technological obsolescence rather than a time period. Would this significantly increase productivity, if we were to make that change?

Mr. MCLURE. It seems to me that probably the faster the depreciation is then the greater effect that has in reducing the rate of tax applied to the return from a given investment. This would naturally tend to stimulate investment.

The trouble is that it doesn't necessarily increase productivity because it is possible through the structuring of transactions and the financing of various activities to engage through the use of debt finance of depreciable assets that are written off very quickly. It's possible to have tax rates that are not only very low, but can actually be negative. Any time you have a negative tax rate, that essentially means that an investment that is of little or no value to society can be of substantial value to the investor, and so the result is not necessarily an increase in productivity.

I think what we need is to make sure that the tax rates remain low, but not negative, and fairly uniform across various investment activities.

Senator GRASSLEY. Now one of the points that always comes up in an alternative tax system is how do you get from here to there. And, of course, we want to be as concerned about not just mechanically how do you get from here to there, but also what's the impact upon economy while we are getting from here to there. So that naturally brings up the question that if we had a transition to a new tax system, whether that would be like a value added tax, national sales tax, gross income tax or whatever you might be talking about,

is there any way of knowing which one of these—and not limited to the list I gave you—would have the least effect on productivity?

Mr. McLURE. You mean the transition?

Senator GRASSLEY. Yes.

Mr. McLURE. Well, the transition——

Senator GRASSLEY. Let me ask about this. Yes.

Mr. McLURE. I think that all too often we do tend to examine tax policy as though we were beginning anew, at the beginning of time. And, of course, we are not. We are beginning in a situation where the tax system is already in place and people have already made occupational investment decisions. And so any time we change the tax system, we do have severe problems of transition. These transition problems, I think, generally tend to fall more in the area of tax equity because windfall gains and losses are often generated when you have changes.

And one of the things we are paying a lot of attention to and worrying about is how can we design a new system that we can actually get to without too much disruption. There certainly would be disruptions in productivity. But I would think that the primary disruptions probably would fall in the equity area through the windfall gains and losses.

Senator GRASSLEY. I guess what you are saying is that there wouldn't be—with almost any of these that you can think of, that there wouldn't be a dramatic decline in productivity.

Mr. McLURE. I would not say there would be a dramatic decline. I would say that there would probably be relatively little impact from the transition per se. I would assume that depending on the tax system that you went to that the increases in productivity could be substantial because of the reductions in disincentives and distortions that currently exist.

Senator GRASSLEY. I meant to ask just about the transition. But you still answered my question.

Have you at this point in time made any determination on which tax system would be the easiest to administer, and, therefore, more productive for the government?

Now remember that I said more productive for the government from the standpoint of, you know, the complexity of administering and all that as opposed to the productivity of the private sector.

Mr. McLURE. Well, I believe that probably administrative difficulties would be reduced, the wider was the tax base, the more things that were in the base, and the fewer exclusions, exemptions, credits and deductions and so forth. It would be easier for the taxpayers to comply with and easier for the government to administer.

The problem, of course, is that there are other kinds of considerations. Once you start taking those into account, then, of course, the simplicity tends to vanish and complexities multiply.

Senator GRASSLEY. My last question I suppose you have addressed to some degree, and so the question is partly for summary but also to have a more encompassing answer is to what we can do about this problem. What problems now exist in the tax code that inhibit productivity, and what disincentives exist that could be eliminated?

Mr. McLURE. Well, I think that there are clearly—I think what I would say is that the most important single source of disincentives

and adverse impacts on productivity must certainly result from the high marginal tax rates that exist. What we have, basically, is a tax system where we are dipping fairly deeply into the income stream with very high rates, but we are doing it with a net that is so full of holes that we come up with very little income. Therefore, we must dip deeply in order to raise the revenue we need.

So in a sense we have the worst of both worlds. We have high marginal rates without gaining the revenue that we need from those rates. I think clearly what we want to do is to broaden the base as widely as we can, consistent with our other objectives, so that we can lower the rates.

Now in addition to that, what I think we should do is to try to treat all sources of income more nearly equal so that we don't distort the way people earn and spend money and the business decisions that are made on investment, production, financing and so forth, because I believe those distortions of business and household decisions are also extremely important in reducing the productivity of the American economy.

Senator GRASSLEY. I want to thank you very much for your testimony and remind you that you may get some questions in writing. And also particularly since a couple of my questions were so all encompassing, if there are any additional things you think about, please submit those in writing.

Thank you very much.

Mr. MCLURE. Thank you.

Senator GRASSLEY. I now have the opportunity to welcome to the witness table a panel of two: John M. Albertine, president of the American Business Conference, and that's located here in Washington, DC; and also Luis Granados, managing director of the Employee Stock Ownership Association, Washington, DC.

I know Jack Albertine. We have worked on many issues together. I know Mr. Granados has a long term interest in the employee stock ownership legislation discussed on the floor of the Senate; particularly, as it involved Senator Long.

So I would like to have Mr. Albertine begin. Then I will have questions of both of you.

STATEMENT OF MR. JACK ALBERTINE, PRESIDENT, AMERICAN BUSINESS CONFERENCE, INC., WASHINGTON, DC

Mr. ALBERTINE. Thank you very much, Mr. Chairman. It's awfully good to see you again. Thank you very much for the opportunity for the American Business Conference to appear this morning to testify at these important hearings.

Mr. Chairman, I would like to submit my statement for the record, and then I will summarize it.

Senator GRASSLEY. Thank you, and that will be done.

[The prepared statement of Mr. Albertine follows:]

STATEMENT
OF
DR. JOHN M. ALBERTINE
BEFORE
THE
SUBCOMMITTEE ON OVERSIGHT OF THE
INTERNAL REVENUE SERVICE
OF THE
SENATE FINANCE COMMITTEE
APRIL 13, 1984

IT IS A PLEASURE TO BE HERE TODAY TO TESTIFY ON WHAT IS PROBABLY THE MOST PRESSING QUESTION OF LONG TERM ECONOMIC POLICYMAKING: HOW OUR TAX CODE SHAPES (OR MISSHAPES) THE PATTERN OF ECONOMIC GROWTH. MY COMMENTS FALL PRIMARILY INTO TWO AREAS. FIRST, I WOULD LIKE TO DISCUSS THE WAYS IN WHICH OUR TAX SYSTEM HAS CONTRIBUTED TO THE VERY HIGH COST OF CAPITAL AND CONCOMMITANT SLOW RATE OF PRODUCTIVITY IN THIS COUNTRY. SECONDLY, I WANT TO DISCUSS THE CONCEPT OF THE CORPORATE INCOME TAX AND WHY IT IS A POOR MEANS OF RAISING REVENUE.

LAST YEAR, THE AMERICAN BUSINESS CONFERENCE, A COALITION OF THE CHIEF EXECUTIVE OFFICERS OF 100 MID-SIZED, HIGH-GROWTH COMPANIES, UNDERTOOK A THOROUGH STUDY OF THE COST OF CAPITAL IN

OUR COUNTRY. ONE OF OUR MEMBERS, DR. GEORGE HATSOPOULOS, CHAIRMAN OF THE THERMO ELECTRON CORPORATION, SUPERVISED THE STUDY, AND HE EMPLOYED SOME OF THE BEST YOUNG ECONOMISTS IN THIS COUNTRY TO ASSIST HIM.

THE STUDY SHOWS THAT THE COST OF CAPITAL IN THE U.S. IS SO HIGH THAT IT IS ABOUT TRIPLE THE COST OF CAPITAL IN JAPAN. HIGHER CAPITAL COSTS HAVE MEANT LOWER LEVELS OF INVESTMENT IN THE U.S. THIS, IN TURN, HAS LED TO LOWER PRODUCTIVITY GROWTH, BECAUSE THE PRIMARY DETERMINANT OF PRODUCTIVITY IS THE RATIO OF CAPITAL TO LABOR. IN THE 1970'S, OUR LABOR FORCE GREW RAPIDLY, BUT OUR CAPITAL DID NOT KEEP PACE. AS A RESULT, AMERICAN PRODUCTIVITY WAS AT A STANDSTILL FOR ALMOST A DECADE.

OUP STUDY SHOWS THAT HIGH U.S. CAPITAL COSTS HAVE PRECIPITATED THE DETERIORATION IN THE COMPETITIVENESS OF U.S. FIRMS IN WORLD MARKETS. FOR EXAMPLE, A CAR CONTAINING $10,000 OF

U.S. LABOR AND CAPITAL WOULD COST ONLY $4,900 IN JAPAN. THE LOWER MARGINAL COST OF CAPITAL IN JAPAN ACCOUNTS FOR $2,300 OF THE COST SAVINGS IN JAPAN.

THE COST OF CAPITAL DIFFERENTIAL BETWEEN OUR COUNTRY AND JAPAN HAS IMPORTANT IMPLICATIONS FOR THE DEVELOPMENT OF THE HIGH TECHNOLOGY SECTOR, THE SECTOR UPON WHICH SO MANY ARE PINNING THEIR HOPES FOR AN AMERICAN ECONOMIC RESURGENCE. THE HATSOPOULOS STUDY SHOWS THAT FOR A PROJECT REQUIRING 5 YEARS OF DEVELOPMENT AND HAVING THE SAME PROBABILITY OF SUCCESS IN THE U.S. AS IN JAPAN, THE ENORMOUS DISPARITY IN THE COST OF CAPITAL WOULD MEAN THAT JAPAN COULD INVEST 2½ TIMES AS MUCH AS WOULD BE JUSTIFIABLE IN THE U.S. FOR A PROJECT REQUIRING TEN YEARS OF DEVELOPMENT, JAPANESE BUSINESSMEN WOULD BE ABLE TO JUSTIFY SPENDING 5 TIMES AS MUCH AS AMERICANS, SOLELY ON THE BASIS OF THEIR LOWER CAPITAL COSTS.

AMERICANS ARE VERY SMART AND INNOVATIVE, BUT WE ARE NOT FIVE TIMES AS SMART AND INNOVATIVE AS THE JAPANESE. SINCE THE JAPANESE WILL BE ABLE TO UNDERTAKE MUCH MORE RESEARCH AND DEVELOPMENT, THEY MAY WELL BE ABLE TO OUTSTRIP OUR MUCH-HERALDED HIGH-TECH SECTOR.

THE STRUCTURE OF OUR TAX CODE IS ONE OF THE KEY FACTORS CONTRIBUTING TO HIGHER CAPITAL COSTS IN THIS COUNTRY. THE DIFFERENTIAL IN CAPITAL COSTS IS NOT SIMPLY THE RESULT OF THE NUMEROUS JAPANESE INCENTIVES FOR SAVINGS. U.S. FINANCIAL REGULATIONS, THE GLASS STEAGALL ACT, AND STANDARD U.S. MANAGEMENT PRACTICES ENCOURAGE U.S. FIRMS TO SEEK EQUITY FINANCING. MOST U.S. CORPORATIONS HAVE A DEBT TO EQUITY RATIO OF 1 TO 3, WHILE FOR MOST JAPANESE FIRMS IT IS 3 TO 1. HOWEVER, SINCE THE RETURN ON EQUITY IS TAXED TWICE IN THIS COUNTRY -- AT THE CORPORATE AND PERSONAL LEVEL -- U.S. FIRMS HAVE TO OFFER A MUCH HIGHER PRE-TAX

RATE OF RETURN IN ORDER TO OFFER A COMPETITIVE AFTER-TAX RETURN. THE COMBINATION OF AN INSTITUTIONAL/REGULATORY PREFERENCE FOR EQUITY AND THE TAX TREATMENT OF EQUITY PUTS U.S. FIRMS AT A REAL DISADVANTAGE.

THE ABC IS CURRENTLY LOOKING AT A NUMBER OF WAYS IN WHICH THE COST OF CAPITAL CAN BE LOWERED. ONE OF THE MECHANISMS THAT WE ARE STUDYING RIGHT NOW IS TO ALLOW DEDUCTIBILITY OF DIVIDENDS ON NEW EQUITY ISSUES. ANOTHER IS A FURTHER REDUCTION OR ELIMINATION OF CAPITAL GAINS TAXES ON INVESTMENTS IN EQUITIES.

IN A CORPORATE WORLD THAT IS DEPENDENT ON EQUITY FINANCING, THE LEVEL OF THE STOCK MARKET IS A KEY DETERMINANT OF THE COST OF CAPITAL. THE STOCK MARKET BOOM OF THE EARLY EIGHTIES DID MORE TO LOWER THE COST OF CAPITAL THAN DID THE DROP IN INTEREST RATES OR THE 1981 LEGISLATION LIBERALIZING DEPRECIATION.

THERE IS CONSIDERABLE EVIDENCE THAT THE 1978 REDUCTION IN CAPITAL GAINS TAXES HELPED TO FOSTER THE ADVANCE IN STOCK PRICES AND, AS A RESULT, LOWERED THE COST OF CAPITAL FOR AMERICAN BUSINESS. IN FACT, I THINK THE REDUCTION IN CAPITAL GAINS TAXES WAS THE SINGLE MOST IMPORTANT ECONOMIC POLICY UNDERTAKING OF THE 1970'S. IT WAS A BRAVE, BOLD STEP TOWARDS CREATING CONCRETE INCENTIVES FOR LONG TERM ECONOMIC GROWTH.

ONCE THE ABC COMPLETES ITS STUDY OF THE POSSIBLE WAYS TO REDUCE THE COST OF CAPITAL, PROBABLY IN LATE SPRING, WE WILL PRESENT IT TO THE COMMITTEE. IN THE MEANTIME, I WOULD LIKE TO OFFER A COPY OF THE STUDY AND AN EXCELLENT ARTICLE ABOUT THE STUDY FROM <u>THE ECONOMIST</u> FOR THE RECORD.

THE SECOND PART OF MY TESTIMONY CONCERNS THE CORPORATE INCOME TAX. I KNOW THAT IN THIS ERA OF DEFICIT DESPAIR NOBODY HAS MUCH PATIENCE FOR BUSINESSMEN WHO COMPLAIN ABOUT HIGH CORPORATE TAXES. HOWEVER, SINCE THIS HEARING WAS INTENDED TO

STEP BACK FROM THE BUDGET FRAY TO SEE WHERE OUR TAX CODE IS TAKING US, I WOULD LIKE TO DISCUSS WHY WE SHOULD EVENTUALLY AXE THE CORPORATE TAX. I THINK THAT FROM THE POINT OF VIEW OF LONG TERM ECONOMIC POLICYMAKING, THE CORPORATE INCOME TAX IS ONE OF THE LEAST EFFICIENT WAYS OF RAISING REVENUE.

FIRST OF ALL, THE CORPORATE INCOME TAX IS NOT PAID BY CORPORATIONS. IT IS PAID BY CONSUMERS, SHAREHOLDERS, AND WORKERS.

* IT IS SHIFTED FORWARD TO CONSUMERS IN THE FORM OF HIGHER PRICES.

* IT IS SHIFTED BACKWARD TO STOCKHOLDERS IN THE FORM OF REDUCED DIVIDENDS.

* IT IS SHIFTED BACKWARD TO STOCKHOLDERS IN THE FORM OF LOWER RETAINED EARNINGS AND THE CONSEQUENT LOWER NET WORTH OF CORPORATIONS.

* IT IS SHIFTED BACKWARD TO WORKERS IN THE FORM OF LOWER WAGES.

WHAT THIS MEANS IS THAT CONSUMERS, STOCKHOLDERS, AND WORKERS ARE PAYING A HIDDEN TAX. SOME LABOR UNIONS SUPPORT HIGHER CORPORATE TAXES AND ARE UNAWARE THAT IT IS THEIR MEMBERS WHO WILL ACTUALLY PAY THIS TAX. THERE IS A TOTAL LACK OF ACCOUNTABILITY FOR THE INCIDENCE OF THE CORPORATE TAX, AND THAT IS WHY POLITICIANS ARE SO ENAMORED OF RAISING CORPORATE TAXES.

THERE IS A SECOND REASON WHY THE CORPORATE INCOME TAX IS POOR ECONOMIC POLICY. THE CONSENSUS OF TAX ECONOMISTS IS THAT MOST OF THE CORPORATE TAX IS SHIFTED BACKWARD -- IT IS A TAX ON LABOR AND CAPITAL. AS SUCH, IT IS REALLY A TAX ON PRODUCTION AND

SLOWS THE GROWTH OF AMERICAN INDUSTRY. THE CORPORATE INCOME TAX MAKES OUR MOST DISTRESSING ECONOMIC PROBLEMS -- EXPENSIVE CAPITAL AND LOW PRODUCTIVITY -- MUCH WORSE. IT IS A BARRIER TO ECONOMIC GROWTH. THE BURDEN OF THE CORPORATE TAX SHOULD BE SHIFTED AWAY FROM WORKERS AND INVESTORS, BECAUSE THEY ARE WHAT THIS ECONOMY NEEDS MOST OF ALL.

THE THIRD AND FINAL FAULT WITH THE CORPORATE TAX IS THAT IT IS NOT SYMMETRICAL. ALL FIRMS DO NOT PAY THE SAME RATE. GENERALLY, LARGE, ESTABLISHED, CAPITAL-INTENSIVE FIRMS PAY MUCH LOWER TAX RATES THAN SMALLER, RAPIDLY GROWING COMPANIES. THE AMERICAN BUSINESS CONFERENCE -- A COALITION OF 100 FIRMS THAT HAVE ANNUAL REVENUES BETWEEN $25 MILLION AND $1 BILLION AND THAT HAVE DOUBLED IN SIZE OVER THE LAST FIVE YEARS -- STUDIED THIS ISSUE. WE FOUND THAT THE HIGHLY SUCCESSFUL ABC COMPANIES PAID EFFECTIVE TAX RATES THAT WERE NEARLY DOUBLE THOSE OF THE FORTUNE 100.

THE SO-CALLED "PEASE-DORGAN STUDY," RECENTLY COMPLETED BY THE JOINT COMMITTEE ON TAXATION, CONFIRMS THE WIDE VARIATIONS IN EFFECTIVE TAX RATES. THE TRUCKING INDUSTRY PAID EFFECTIVE RATES AVERAGING ABOUT 40% OVER THE 1980-1982 PERIOD, WHILE THE CHEMICAL INDUSTRY PAID ONLY 4.3%. THE COMPUTER INDUSTRY PAID ALMOST 25%, WHILE THE PAPER INDUSTRY ENJOYED NEGATIVE TAXES.

THIS LACK OF SYMMETRY CAUSES A MISALLOCATION OF RESOURCES. IF YOU COULD MAKE A $10,000 INVESTMENT WHICH WOULD HAVE THE SAME PRE-TAX PAYOFF IN EITHER COMPUTERS OR PAPER, THE TAX CODE WOULD FORCE YOU TO PUT YOUR MONEY IN PAPER. THE EXISTENCE OF THE CORPORATE TAX THWARTS THE EFFICIENT ALLOCATION OF RESOURCES. IT SKEWS RESOURCES AWAY FROM HIGH TAX INDUSTRIES -- OFTEN NEW, RAPIDLY GROWING SECTORS -- AND TOWARDS LOW TAX INDUSTRIES -- FREQUENTLY OLDER, DECLINING SECTORS. OUR RESOURCES WOULD BE ALLOCATED MUCH MORE EFFICIENTLY, AND OUR NATION'S OUTPUT WOULD BE HIGHER IN THE ABSENCE OF A CORPORATE INCOME TAX.

PROPOSALS TO IMPOSE A CORPORATE SURTAX WOULD ONLY EXACERBATE THE ASYMMETRY PROBLEMS ASSOCIATED WITH THE CORPORATE TAX. A SURTAX WOULD RENDER THE ALLOCATION OF AMERICA'S RESOURCES LESS EFFICIENT. A CORPORATE SURTAX LOOKS GOOD ON PAPER, BECAUSE IT IS A HIDDEN TAX AND APPEARS TO BE AN EQUITABLE TAX. HOWEVER, BECAUSE OF THE WIDE DIFFERENTIAL IN EFFECTIVE TAX RATES, IT IS A VERY INEQUITABLE TAX. THOSE ALREADY PAYING THE HIGHEST TAX RATES WOULD PAY THE MOST. THOSE PAYING THE LOWEST RATES WOULD PAY THE LEAST. SINCE IT WOULD RESULT IN FURTHER MISALLOCATION OF OUR RESOURCES, IT WOULD CERTAINLY NOT BE CONSISTENT WITH LONG TERM ECONOMIC GROWTH.

GOOD ECONOMIC POLICY STRIVES TO INCREASE NATIONAL OUTPUT AND MAKE OUR ECONOMY MORE COMPETITIVE. TO ME, THIS MEANS THAT WE SHOULD TRY TO REDUCE MARGINAL CORPORATE TAX RATES. WE SHOULD WORK TOWARDS THE OVERALL ABOLITION OF THE CORPORATE INCOME TAX AND REPLACE THE LOST REVENUE WITH TAXES WHICH DO NOT PENALIZE

SAVINGS AND INVESTMENT. IT IS TIME FOR A REVOLUTION IN TAX POLICY. WE MUST TURN FROM A LOW GROWTH STRATEGY TO A HIGH GROWTH STRATEGY. WE MUST TURN AWAY FROM TAXES WHICH PENALIZE PRODUCTION AND THWART SAVINGS AND INVESTMENT AND TURN TOWARDS POLICIES WHICH OFFER INCENTIVES FOR PRODUCTION, THRIFT, RISK-TAKING, AND INVESTMENT.

THANK YOU!

Mr. ALBERTINE. Mr. Chairman, there are two issues that we would like to bring to your attention today, and they are interrelated. The first issue is the cost of capital in the United States and, particularly, the cost of capital in the United States relative to that of our major trading partners.

It is clear to the members of the American Business Conference that the most important economic issue of our time is the growth rate of productivity. If we have a zero growth rate of productivity, and a zero inflation rate, the standard of living of the average American will decline. If we have a 3-percent increase in the growth rate of productivity, and a 50-percent inflation rate, the standard of living of the average American will rise. Sometimes, we get so concerned about the financial questions that we lose sight of the real issue, the potential of this economy to produce real wealth over time. Real growth comes from productivity improvement so that is the fundamental economic issue of our time.

The productivity growth rates in our country have declined largely because of the decline in the capital-labor ratio. Mr. Chairman, the capital-labor ratio has been declining because of the high cost of capital in the United States relative to that of our trading partners. The American Business Conference has done a study on this issue, and I would like to submit that study if I can at this point for the record.

Senator GRASSLEY. Yes, it will be.

[The study is in the official committees files.]

Mr. ALBERTINE. The author of the study is George Hatsopoulos, who is the chairman of the board of the Thermo Electron Corp., as well as being an excellent economist. The people who worked on the study were a group of economists from MIT and a number of chief executive officers from around the country.

What we found, Mr. Chairman, looking at the data since 1965 for all publicly held companies in America is that the debt/equity ratios for American corporations average about 1 to 3. If you look at debt/equity ratios in Japan, you find the inverse. The Japanese debt/equity ratio is about 3 to 1.

The differences in debt/equity ratios have profound implications for the cost of capital in the United States. We calculated that in 1982, when triple A corporate bond rates were about 12 percent, the actual cost of capital in the United States was about 20-percent. To measure the actual cost of capital, you have got to look not just at the cost of debt, but at the cost of equity, and there are two reasons why equity is far more expensive than debt.

One, equity holders bear a greater risk than debt holders. Second, equity is more expensive because of the asymmetrical treatment in the tax code of equity and debt. Dividend payments on equity are not tax deductible, while interest payments on debts are tax deductible.

The difference in the cost of capital, we think, is terribly, terribly important. Not just for the high growth companies of the American Business Conference, but for all industry in America. For example, we did an analysis of the effects of cost of capital on the steel industry since 1965. Since we represent no steel companies, we thought we had some credibility on this subject.

If, since 1965, the steel industry in the United States, Mr. Chairman, had had the same cost of capital as the steel industry in Japan, our numbers show that the steel industry in the United States would have been able to invest an additional $3 billion a year in steel capacity. The obvious conclusion from those numbers is that if we had had the same cost of capital as the Japanese, our steel industry would be in much better shape. In fact, it would be competitive.

We also looked at the implications of the differential in the cost of capital for the future of our high technology sector. Those numbers are very disturbing in terms of where we are heading and where our competitors are headed.

For the same 10-year project undertaken in the United States and in Japan, the existing differential in the cost of capital would allow the Japanese to invest about five times more than American corporations could invest. Now we think we might be smarter than the Japanese, but we are not five times smarter. That means that our technological edge is going to diminish

If you collapse that project to a 3-year project, Mr. Chairman, you find that the ratios decline from about 5 to 1 to about 2.2 to 1. That may be why American management has such a short-term time horizon. It is the correct strategy given that our cost of capital is significantly higher than the costs of capital among our trading partners.

The point of all this, Mr. Chairman, is that we can do something about this problem without changing our financial structure. We would not advocate changing any of the institutional arrangements which give us our debt/equity ratios. We think the equity markets in this country are terribly significant in terms of new start-ups and innovation and the like. We do not want to emulate the Japanese system.

Mr. Chairman, let me make one other critical point. The Japanese are successful not because they are targeting or because they have industrial policy, but because their cost of capital is so much lower. They have so much debt and interest payments on that debt are deductible. We have a tax system that does not permit deductibility of dividend payments, but imposes double taxation on equity investments. It puts us at a competitive disadvantage, so we think it is essential that we address the taxation of equity in our economy.

Thank you, Mr. Chairman.

STATEMENT OF MR. LUIS GRANADOS, MANAGING DIRECTOR, THE EMPLOYEE STOCK OWNERSHIP ASSOCIATION, WASHINGTON, DC

Senator GRASSLEY. Mr. Granados.

Mr. GRANADOS. Thank you, Mr. Chairman. I will also summarize my remarks and ask that a somewhat expanded version of my statement, other than what I have already submitted, be included in the record.

I'm the managing director of the ESOP Association, the national, nonprofit association of companies with Employee Stock Ownership Plans. And I appreciate the opportunity to discuss with the committee today the impact on productivity of one particular aspect of

tax policy, the aspect dealing with Employee Stock Ownership Plans.

Mr. McLure earlier this morning described a number of steps that have been taken in recent years to encourage new capital formation as a means of improving productivity. These steps are important and necessary, and we wholeheartedly support them.

But there is a human side to productivity as well as a mechnical side. And it's all well and good for a company to use tax credits and accelerated cost recovery and R&D credits and what have you to purchase new machines and equipment, but when that equipment gets down to the plant floor, someone is going to be operating it. And if the people who are operating them are not sufficiently motivated to be able to learn how to get the most out of that equipment, if they don't show up for work on Friday, if they jump from job to job to job, if they drink or take drugs at work, if they steal from the company, and if they just plain don't give a damn whether the company makes a profit or whether it doesn't, then the company is not going to be getting the kind of productivity it should out of that equipment, and the Congress is not going to have gotten all the productivity that it intended to out of the preferences that it gave.

The Employee Stock Ownership Plan is a proven method of changing employee attitudes about their jobs because it relies on basic human nature. By giving employees a piece of the action in the companies for which they work, the ESOP give them a reason to care more about their jobs, to care more about the bottom line. Not just a pep talk or an empty slogan or a poster plastered on a trash can, but a powerful incentive to work smarter and to be more conscientious and to improve profits so it can improve the value of their own stock ownership.

Does owning a piece of the action really make a difference to employees? Of course it does. And my testimony recites a number of statistics, studies that have been done all of which prove that common sense notion. One that may be of particularly timely interest to the Senate today is that among our association members we asked them to compare the 3 years before they instituted an ESOP to the 3 years afterwards. Sales increased 72 percent, profits increased 157 percent, employment increased 37 percent, and of most interest perhaps is the amount of taxes that they paid to the Federal Government increased by an even 150 percent.

Another way of looking at the issue is not to look at ESOP's and see if they have become successful, but to look at successful companies and see who owns them. Jack Albertine's organization is an organization of companies that are highly successful. They have to be highly successful in order to be a member. And when you look at who owns them, as MacKenzie & Co. did, you see that on the average they are 30-percent owned by their employees, and not just the top management, but a great bulk of those employees are the nonmanagement rank and file. No wonder they are so successful.

And if you want to talk about the Japanese, and look at who owns the Japanese companies, you are going to find the same thing. The Japanese employees own a very significant percentage of the companies for which they work.

Mr. Chairman, the committee is beseiged by statistics everyday, and after a while the eyes tend to glaze over What has always impressed more than any of the statistics that I've read and cite everyday are the fact that I have visited dozens of these companies, and I have talked to hundreds of employee owners individually, and I don't know how to convey in a dry statistic the spirit and the atmosphere you see when you do that, but I know that it's there.

Last night I had the privilege of being in the gallery while you, Mr. Chairman, presided over the Senate. And I recall at one point Senator Byrd rose and said that he had had some good news. And I was hoping that he was going to say that something had been worked out so that we could all go home, but that wasn't it.

What he had to announce was that the Weirton Steel Corp., which is the largest private employer in West Virginia and the largest taxpayer in West Virginia, had just announced their first quarter results, and they made a profit in the first quarter of 1984, which is significant because as their first quarter of operation as America's largest 100-percent employee-owned company. And it's also significant because it's the first quarter they have had a profit since 1981.

Now if the committee wants to learn something about productivity, I would suggest that at some point in the future when things calm down a little bit you might want to have a field hearing in Weirton, WV. And when you talk to the employees there, you are going to see a spirit and an atmosphere and a drive and a dedication that I wish really everyone in the country could see because I think it's something that we can be proud of as Americans.

Mr. Chairman, this committee and now the full Senate has adopted onto this tax bill a number of provisions relating to employee stock ownership plans that will have a tremendous impact in encouraging their formation and their growth. And the net revenue impact of these provisions is a gain to the Government of $400 million, even assuming that there is no impact on productivity, which we believe is an incorrect assumption.

I want to thank and congratulate the committee for doing that, and I want to urge you to stick to your guns when you get to the conference committee with the House of Representatives because, as I said at the outset, we need to encourage not just more machines, but the human side and the incentive side and the supply side, if you will, of productivity as well.

Thank you very much.

[The prepared statement of Mr. Granados follows:]

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STATEMENT LUIS GRANADOS, MANAGING DIRECTOR OF THE ESOP ASSOCIATION

SENATE FINANCE COMMITTEE SUBCOMMITTEE ON OVERSIGHT

HEARINGS ON THE EFFECTS OF TAX POLICY ON PRODUCTIVITY

APRIL 13, 1984

My name is Luis Granados. I am the managing director of The ESOP Association, the national, nonprofit association of companies with Employee Stock Ownership Plans ("ESOPs"). I appreciate the opportunity to discuss the impact on productivity of one particular aspect of tax policy, the Employee Stock Ownership Plan.

Mr. Chairman, the human side of productivity is every bit as important as the mechanical side. It is all well and good for a company to use tax credits, accelerated depreciation, and other preferences to buy shiny new machines to increase their output. But if you have employees working with those machines who are not motivated to learn to get the most out of them, who don't show up for work on Fridays, who jump from job to job to job, who drink or take drugs at work, who steal from the company, and who plain don't give a damn about whether or not the company makes a profit, then those shiny new machines are not going to do you much good.

The Employee Stock Ownership Plan is a proven method of changing employee attitudes about their jobs, because it relies upon basic human nature. By giving employees a piece of the action in their companies, the ESOP gives them a <u>reason</u> to care more about the bottom line. Not just a pep talk or an empty slogan, but a powerful incentive to "work smarter" and be more conscientious about doing things the way they should be done.

Does owning a piece of the action really make a difference to employees? Of course it does. The University of Michigan Survey Research Center did a study for the Commerce Department that showed that companies with significant employee ownership had profitability rates 50% higher than similar sized companies in similar industries. The University of Iowa did another study that showed that while national productivity rates were declining by 3 percentage points from 1975 to 1979, the same rates among ESOP companies were rising by 3 percentage points. And the studies prove one other common sense point: the greater the percentage of the company that the employees own, the greater the impact upon productivity.

That's why our Association was pleased to see the Senate Finance Committee add several ESOP provisions to the pending 1984 tax bill. The net effect of this package is a $400 million revenue gain for the federal government — even assuming that there is no impact on productivity, which we believe is a <u>faulty</u> assumption. These provisions would encourage the formation and growth of ESOPs in a number of ways:

1. They provide a tax free rollover on sale of stock to an ESOP when the proceeds are reinvested in other stock. This will remove the present bias in the tax law in favor of selling companies to conglomerates rather than selling them to employees.

2. They provide a corporate tax deduction for dividends paid to an ESOP and passed through to employees. There is no more powerful means available for explaining the risks and rewards of ownership to employees than by paying them a dividend in spendable cash that will rise and fall with the fortunes of the company. The Finance Committee bill will make it practical for more and more employers to begin doing that.

3. They provide an incentive for lenders to make loans to ESOPs by exempting from tax half of the interest the lender receives on such a loan. The attention-getting ESOPs that have been used to save tens of thousands of jobs all have involved ESOP borrowing, and this will make lenders much more interested in getting involved in these cases.

4. They encourage investments in majority employee owned enterprises by cutting in half the capital gains tax on these investments.

5. They encourage gifts and bequests to ESOPs by treating them as though made to a foundation. Many owners are willing to include an ESOP in their will if they can get the kind of tax treatment this bill provides.

6. They encourage sales of stock to ESOPs by exempting from estate taxation half of the amounts realized on such sales. The original purpose of the estate tax was to disperse great aggregations of wealth, and this provision accomplishes that purpose.

7. They give estates the option to transfer estate tax liability to an ESOP by transferrring an equivalent amount of stock to it. This solves headaches for the heirs while at the same time providing substantial stock ownership for employees.

Mr. Chairman, this Committee has taken a decisive step toward the broadening of capital ownership in this year's tax bill, and I hope that you will "stick to your guns" when these issues come up in Conference with the House.

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Senator GRASSLEY. Before I ask specific questions, I would like to know if it's a fair conclusion from each of your testimonies that you, Mr. Albertine, would say that the problem is cost to capital. You, Mr. Granados, think the Congress ought to concentrate on employee incentives, as a way of increasing productivity as opposed to setting the issue of whether or not there ought to be massive tax reform?

Mr. ALBERTINE. Mr. Chairman, may I specifically address both parts of your question?

Senator GRASSLEY. Sure.

Mr. ALBERTINE. We think that the most important thing you could do with respect to tax reform would be to eliminate the corporate income tax, because the issue of double taxation is very significant, as I pointed out, in terms of the cost of capital. It's also important in terms of its asymmetrical impacts on effective tax rates. The asymmetrical misallocates resources and is a barrier to economic growth. So if we are going to reform the tax system, we would like to see marginal rate reductions on the personal side as well as the corporate side

And on the issue, Mr. Chairman, of productivity performance, it is absolutely true that the companies of the American Business Conference believe in the notion of giving the employee a stake in the company's future. That's how you build a strong organization. One of the things that this committee could do to help that process would be to take a look at the incentive stock options provision which was installed in the 1982 act.

Senator GRASSLEY. Before you answer, is that another way of saying that our major emphasis ought to be upon the corporate tax structure as opposed to individual tax policy?

Mr. ALBERTINE. No, sir, I would do both. I think we should have marginal rate reductions both on the individual side and on the corporate side.

Senator GRASSLEY. Did you have any comment on my assumption of your conclusions?

Mr. GRANADOS. Yes, Mr. Chairman. We are, of course, quite interested in providing incentives for employees. This is certainly not the entire answer. And the other broader questions that the committee is looking at are bigger in the overall scope of things.

But the question of incentive should not be left out. And the question of who owns all this new capital that is going to be formed—they estimate $2 to $5 trillion capital will be formed in this country by the end of the century. Someone is going to own all of that. And we think that the committee should pay some attention to the question of who is going to own it.

Senator GRASSLEY. Well, do you fear any discussion of alternate forms of taxation, or the simplified income tax as detrimental to your goal of encouraging employee interest in where he works or his business?

Mr. GRANADOS. Not necessarily. No, Senator.

Senator GRASSLEY. The next question I would like to have you both answer. The majority of funds for primary investment, meaning plants and equipment, are internally generated. Many credit this, of course, to the 1981 Tax Act. I would like to ask, however, if it isn't possible that you couldn't also ascribe some of that to the

desire for companies to retain earnings because of high interest rates that we have had?

Mr. ALBERTINE. Mr. Chairman, there is no question that the 1981 act helped. I would quarrel a little bit with Mr. McLure about how much it helped. If you look at what happened in 1981, I think the net effect was a lot less significant than many of us hoped.

With respect to the question of retained earnings, I think it's very important to remember that from our perspective retained earnings are equity. If you have retained earnings, you can distribute those resources to your stockholders or you can invest them in new activities of the corporation—plant and equipment, new R&D, that sort of thing—or you can buy your own stock back.

Since we now have an equity market which is essentially depressed, a number of companies are going into the market and buying their own stock back. The rate of return they can earn on their own stock is greater than the hurdle rate of return they need to justify investing in their own assets. The second thing we see happening with retained earnings is because of the high hurdle rate of return that deters people from investing in their own assets, investors have gone off and bought other people's assets because equity prices are low.

If we, for example, Mr. Chairman, had a Dow Jones of 3,000, our estimates are that we would have the same cost of capital in the United States as the Japanese, even though we have so much more equity than debt.

So the interest rate issue is important as it relates to the question of what it is doing to the stock market, where it's depressing equity prices. To the extent to which it is depressing equity prices, it's preventing firms from using retained earnings for investment in their own assets.

Senator GRASSLEY. I would like to have you comment on the same question.

Mr. GRANADOS. Well, one of the advantages of the employee stock ownership plan, and one of the explanations for its growth in the past few years, is because it can enable a company to really kill two birds with one stone. It is a combination of a technique of corporate finance, and an employee benefit plan. And certainly the high interest rates have slowed all forms of borrowing. But the companies that have borrowed through an ESOP rather than borrowing conventionally have been able to get the net effect of a cheaper rate of borrowing because they have been able to do two things with the same transaction rather than having to do two separate transactions to accomplish two purposes.

And by providing the kind of encouragement to ESOPs that is contained in the Senate committee bill, we think that that will help these kinds of transactions even more.

Senator GRASSLEY. This is probably more directed just to you, Jack, but if you want to respond, Mr. Granados, it will be all right, too. And it deals with ailing industries and what if anything, we ought to do for industry specific tax treatment of those ailing industries.

Mr. ALBERTINE. I think we need to restructure the Tax Code fairly drastically. I agree with the notion that we should move toward some sort of consumption-based system and, at the opti-

mum, abolish the corporate income tax. The corporate income tax is a significant barrier to economic growth, because corporations shift most of that tax backward in the form of lower rates of return to the stockholders and lower wages for workers.

That's one of the major reasons that we have ailing industries in this country, Mr. Chairman. If we were to abolish the corporate income tax, I think that that would have a profound effect, particularly on equity prices. If we had a booming equity market in this country, a lot of the basic industries in our country would be in much better shape in terms of their ability to raise significant amounts of revenue in a reasonable fashion for investment purposes. I would resist the notion that we should have any sort of industrial policy or that we should have some sort of reconstruction finance corporation. It would be preposterous to get the Government involved in the steel industry.

But, I do think we should take a look at the issue of the cost of capital. So much of our capital—three-fourths of the capital in America is equity, and equity is doubly taxed. Unless we address that fundamental problem, I think that those ailing industries may continue to be non-competitive with our trading partners'.

Mr. GRANADOS. We would certainly agree that industry specific tax treatment for ailing industries does not make sense, and we would not support that. But also add that while it is certainly not a panacea, the employee stock ownership plan is helping right now a lot of companies that would have otherwise been closed down, Wierton Steel being the most prominent example. And the general encouragement to employee stock ownership plans, if it is contained in the final tax bill through this year, is going to save a lot of jobs.

Senator GRASSLEY. Your statement about moving towards a consumption tax, is that your personal view or is that also a view held by the CEOs of your membership corporation?

Mr. ALBERTINE. Mr. Chairman, it's the stated position of the American Business Conference. And we have stated and restated it about four times.

Senator GRASSLEY. All right.

Mr. ALBERTINE. I might add quickly that what we are talking about is an alternative tax, a substitute tax.

Senator GRASSLEY. Yes.

Mr. ALBERTINE. The one danger, as you know, Mr. Chairman——

Senator GRASSLEY. As opposed to just an additional form of taxation.

Mr. ALBERTINE. Yes, sir. Mr. Chairman, you have led the fight in this committee and in the Senate to try to limit the rate of growth of Federal spending and limit the rate of growth of Government. We think that that is terribly important. Obviously, if you simply add on a consumption tax, we will have greater growth of Government and slower productivity growth. So we would oppose a consumption tax that is simply an add-on tax. We would support it as a general restructuring proposal.

Senator GRASSLEY. Is there anything we ought to do that would encourage investors and workers to seek out the most productive industries and opportunities? Maybe the answer to that, obviously, could be just the private—the free force of the marketplace work-

ing. But I just wondered if Government might have a leadership role in helping to get people to know what is the most productive and to get the maximum human effort and the capital effort in those directions.

Mr. ALBERTINE. Mr. Chairman, I think the best thing the Federal Government can do is to lower rates across the board, personal as well as corporate. Investors in this country are very smart, and there are lots of very smart people all over the country making judgments about good economic investments. I don't really think that the Government of the United States should try to allocate resources, because every time that happens you get involved in raw politics. Raw politics and economics, in my judgment, don't add up to economic efficiency. So I think you need rate reduction across the board.

Senator GRASSLEY. My last question would be to you, Mr. Granados. You spoke well, and the major point of your paper was that if you improved employee motivation, obviously, it is going to increase productivity. You spoke of isolated instances where you feel that that has been amply demonstrated. I wouldn't detract from that.

But I would ask if there has been any sophisticated attempt by you or academia or economists generally to show us in a scholarly way that productivity is increased. Now, you generalized in the case of Japan as an example. Americans have this perception, but has it been demonstrated statistically?

Mr. GRANADOS. Yes, Senator. And in my written statement, a portion I skipped over, the Survey Research Center at the University of Michigan did a study funded by the Department of Commerce. And it showed that among the companies studied with substantial employee stock ownership plans, that their rates of profitability were 50 percent higher than a sample of similar sized companies in similar industries.

And the University of Iowa did a study.

Senator GRASSLEY. My university, you say?

Mr. GRANADOS. The University of Iowa, yes, sir.

Senator GRASSLEY. I should say the University of Northern Iowa is my university, but my State university.

Mr. GRANADOS. They did a study and that study compared a sample of ESOP companies, and the statistics on productivity with that sample compared to the national sample at the same time, during the years 1975 to 1979. And the measure of productivity that they used on the national sample declined by 3 percent from 1975 to 1979. Among the ESOP group it increased by 3 percent from 1975 to 1979.

The statistics done on our own members show basically the same things. Yes, the studies have been done. And there are more than just those that I have cited. There are several going on right now. And they all tend to show the same very commonsense result.

Senator GRASSLEY. That's all the questions that I have. And I want to thank you very much. And perhaps I'm taking longer than I should in asking questions, because we have some very distinguished panelists today, and you two are no exception. But I do want to hasten on.

And thank you very much.

Mr. ALBERTINE. Thank you, Mr. Chairman.

Senator GRASSLEY. The next panel is made up of three people: Robert J. Genetski, vice president of the Harris Trust and Savings Bank of Chicago, IL; Dr. Richard Rahn, vice president of the U.S. Chamber of Commerce, Washington, DC; and Dr. Paul Craig Roberts, the William E. Simon Fellow in Political Economy, the Center for Strategic and International Studies, Washington, DC.

I believe everybody here knows all these gentlemen. I guess I would ask you to proceed in the way that I introduced you. But before you do that, Mr. Genetski, I would like to take an opportunity, if I could, because I may be leaving town and not have a chance to visit with you—Dr. Rahn, I would like to encourage you and your organization to consider, now as the budget process moves to the floor of the Senate, the various alternatives and maybe a reconsideration of what the organization might support in the way of a budget resolution. And I point again to the Grassley-Kassebaum-Biden-Baucus budget freeze as the only one in the Senate where there is no blue smoke. It's all up front. It's front loaded for savings that we know now is not relied upon for future agreement by future Congresses. And one that even though it has a tax increase in it, which I know your organization doesn't like any tax increase—and I don't disagree with you on that—but one that I think will really send a signal to the people that we need to send a signal in this country that this isn't business as usual anymore in Washington if we would really dramatically freeze 1985 expenditures at the 1984 levels across the board.

You don't have to comment. But if you want to, I would be happy to have you.

Dr. RAHN. First of all, I want to applaud you for that effort because as you well know we had been strong advocates of a freeze on the domestic side of the budget. We are concerned about the defense side. But we will continue to work with you and your staff as the process goes forward. We want lower spending, as you do. And we are proud of your efforts.

Senator GRASSLEY. Well, thank you. And I wouldn't have brought it up except to intervene between the first time I contacted you and now is, I think, very encouraging activity on the part of the Budget Committee as they look at this for the first time in 3 years in a serious effort. And we have had, of course, a deteriorating number of years as far as the budget deficit is concerned. And the longer you go, I think, the more dramatic are the things we are going to have to do. And the sooner we do it, the easier it's going to be. And if we don't do it this year, next year, if we can wait until next year.

Would you proceed, please?

If anybody else wants to put in a commercial, I will let them. [Laughter.]

STATEMENT OF MR. ROBERT J. GENETSKI, VICE PRESIDENT, HARRIS TRUST AND SAVINGS BANK, CHICAGO, IL.

Mr. GENETSKI. Senator, for the past 6 years the bulk of my economic research at the Harris Bank has been directed toward trying to understand the impact between the tax system and productivity

changes in the economy. And, basically, for the bulk of that period there were two main problems in trying to trace that relationship.

One, we did not have a good measure of the tax burden, which might affect the economy. And, two, we didn't have a good measure of structural productivity and how that performs.

I believe that both of those issues have now been resolved to the point where we can view structural productivity trends over various time periods and also measure tax burdens on the economy.

I would like to refer you to chart 3 in my testimony at this point. Chart 3 shows our estimates for structural productivity trends and how they have changed over the course of the past 30 years. It shows, for example, the very sharp increases at some points, the slowdown that occurred in the 1970's, and the severe deterioration that has been spoken about with respect to the late 1970's.

The chart on the following page, chart 4, shows the changes in productivity that have occurred during each of these particular subperiods as indicated by the bold black boxes on the chart. The hash marks show the change in effective marginal tax rates that were occurring during each of those periods. Of the five periods since the mid-1950's when productivity trends had deteriorated, in each and every one of these instances, there were increases in our measure of the effective marginal tax rates. In the four instances when the productivity trend—this is the structural or underlying productivity trend—had increased, there had been reductions in effective marginal tax rates.

The most recent experience includes the productivity improvement that occurred in 1982 and another productivity improvement in a structural sense that occurred in 1983. Both of these improvements, I believe, are associated with the reductions and effective marginal tax rates that were instituted as part of the 1981–84 tax reduction package.

Senator GRASSLEY. That is mostly personal?

Mr. GENETSKI. Yes. As a matter of fact, this is all personal. And my reasons for choosing this as opposed to the corporate tax are all presented in my written testimony.

Our estimates show that there are no significant changes in the effective marginal tax rates under existing legislation for 1984 and 1985. And as a result, the implications on productivity is that we also should have no significant changes in underlying structural productivity trends.

Senator GRASSLEY. You would even say that a locking in bad tax policy is better than making yearly changes in tax policy. Is that what you are saying? I mean even if that were the case, that you might be locking in bad tax policy, it's better to leave the bad tax policy in than to always——

Mr. GENETSKI. And make it worse.

Senator GRASSLEY. Or to be changing it from year to year because of the inability of business and people to predict what the tax policy will be.

Mr. GENETSKI. That's one aspect.

Senator GRASSLEY. But that's not your main point.

Mr. GENETSKI. No. Let me get to my main point because I think it is very interesting and disturbing.

Senator GRASSLEY. I'm sorry.

Mr. GENETSKI. And it's the next one. The most disturbing aspect of this whole analysis is with respect to what lies ahead. From 1985 to 1990, our calculations show that we will have an increase in the effective marginal tax rates that is already built into existing legislation. This occurs not as it did in the 1970's because people are kicked into the higher tax brackets as inflation lifts their income up, but they will be moved into higher tax brackets as their real incomes increase in these years. Again, the figures on this are presented in my written testimony.

Given the past relationships between changes in productivity and changes in effective marginal tax rates, the built-in tax increase that I have just described, I would expect, would have the affect of lowering our structural productivity trend by about 1 percentage point a year, returning us to the sort of structural stagnation that characterized the period of the late 1970's.

Senator GRASSLEY. You would say that if we didn't have indexing, that would even be worse?

Mr. GENETSKI. Much worse. Enormously worse. And I just have two concluding statements here, and then I would be more than happy to answer any questions you have.

The results of this research lead me to two recommendations. One, to prevent the problem of productivity from getting any worse than it is already going to get, I believe Congress should avoid any action which raises the effective marginal tax rates. Now what that means in terms of the way we have measured effective marginal tax rates is we must avoid any action to close loopholes, which was one of the reasons the effective rates went up in the late 1970's; we should avoid any sales taxes, value added taxes or consumption taxes, all of which have the impact of raising effective marginal tax rates.

And, two, if we want to improve or even just to maintain the present productivity trend, it will be necessary to reduce the current structure of marginal tax rates in the future. The larger that reduction, the more likely I believe it's going to be that future generations will be able to continue to live and work in the most productive economy in the world.

Senator GRASSLEY. You would also have to connect with that, with a change in the expenditure policy of the Federal Government. I mean the expenditure side of the Federal budget.

Mr. GENETSKI. The research that I have done has focused primarily on the impact of taxes on the system. In looking and trying to measure the impact of Government expenditures on productivity, I have been unable to find any significant type of relationship. That may simply be because the current measures of Government expenditures don't lend themselves very easily to measure an impact on productivity. For example, if the Government were to spend a lot of money on infrastructure, bridges, roads, harbors and things like that, this could actually aid productivity. If the government spent a lot of money on discouraging work, unemployment benefits, which made it more attractive to be unemployed than working, this would have a great deal of harm in terms of productivity.

So I don't believe that it's an aggregate figure of expenditure that we should expect to look at and judge the impact that that

might have on productivity. I believe it's far more complex than that.

Senator GRASSLEY. You are right except we have had a growing emphasis in the Federal budget on income transfers. That's been detrimental to productivity.

[The prepared written statement of Mr. Genetski follows:]

THE IMPACT OF MARGINAL TAX RATES ON U.S. PRODUCTIVITY PERFORMANCE

by Robert J. Genetski
Vice President and Chief Economist
Harris Trust and Savings Bank

One of the prime objectives of economic policy is to encourage strong productivity performance. Since the productivity or efficiency of any economy is the most important factor determining a country's living standard, understanding why productivity behaves as it does may be the single most important issue in economics.

Studies which try to explain productivity behavior often confuse the characteristics of a productive economy with the initiating factors. Hence, a laundry list of items are often presented to explain a country's productivity performance. This list includes such things as education and skills of the labor force, managerial expertise, investment in plant and equipment, expenditures on research, and so on. While each of these factors may influence productivity, using them to explain its performance evades the question. Although education and managerial expertise may be important, the motivation behind becoming more educated or more skilled is the essential factor. Similarly, saving and investment in machines or research are important for growth, but it is the reasons behind the saving and investment that must be understood. For truly understanding the behavior of productivity, it is important to focus on those key factors that initiate changes in incentives to save, invest, and organize activity. Such initiating factors include free markets and tax burdens. My testimony deals primarily with one of these factors—tax burdens and their impact on productivity trends.

Tax Rates and Productivity Performance—The Theory

In theory, economists long have recognized the importance of taxes. To quote Adam Smith:

> Little else is requisite to carry a state to the highest degree of opulence from the lowest barbarism, but peace, easy taxes, and a tolerable administration of justice; all the rest being brought about by the natural course of things.[1]

Although economists agree that at some point taxes become counterproductive, they cannot agree on where that point might be.[2] Even more disturbing is the disagreement over which tax rates are most influential for economic growth. Some economists emphasize average tax burdens based on the share of an economy's income devoted to government spending. Others emphasize the tax on capital or investment as having a key impact on growth.[3] Still others emphasize the importance of marginal tax rates on individuals. While any of these tax burdens holds the potential to impact growth, the most important measure for the U.S. economy is the marginal tax rate faced by individuals.

*Testimony submitted to the Congressional Subcommittee on Oversight of the Internal Revenue Service, Washington, DC, April 13, 1984.

The Appropriate Tax Measure

Measures of the average tax burden, based either on average tax receipts or on the share of income devoted to government programs, are likely to be too limited to adequately measure the burden on the economy. Government programs differ significantly in the extent to which they impair growth. For example, government programs which help to build a much needed infrastructure have a positive impact on the economy, while those which discourage productive work by subsidizing leisure have a negative impact. Also, a rising share of income devoted to government could just as easily reflect a rundown economy as it could a runaway government. Moreover, even with a relatively low share of income devoted to government, few would reject the view that growth prospects could easily be destroyed if all income above $20,000 were taxed at prohibitive rates. As a result of these problems, an average tax burden is unlikely to provide an appropriate gauge for measuring the impact of taxes on growth.

Another measure of tax burdens—corporate taxes—also has drawbacks. Most significantly, corporations do not pay taxes, they collect them. Corporate tax payments merely reflect some combination of lower returns to investors, lower wages to workers and higher prices to consumers, with each of these respective groups incurring the burden of the corporate tax. Moreover, for the U.S. economy corporate taxes represent a fairly small proportion of all taxes.

The best measure of a potential burden on economic performance is obtained by considering marginal tax rates for individuals. Since people produce solely for present or future consumption, incentives to produce will depend on individuals' abilities to fulfill their wants. In this regard, it is their additions to after-tax income that become crucial for decisions regarding additional productive activities.

Impact of Marginal Tax Rates on Growth

Higher marginal tax rates damage incentives for growth in many ways. Higher taxes directly usurp private savings, create disincentives to save, and misallocate available savings. In addition, they adversely influence productive work and the efficient allocation of resources. The adverse impact of higher taxes on potential savings is obvious, yet often neglected. As tax rates rise, the decline in individuals' after-tax income will reduce both their spending and saving. Furthermore, as tax rates increase, individuals can be expected to use funds that would have gone to savings in an effort to maintain living standards.

For higher income groups, higher taxes clearly misallocate resources as individuals attempt to reduce their effective taxes. The increase in demand for tax lawyers and accountants finds some of the nation's brightest minds working to channel investment resources into areas that will lower tax burdens. These decisions direct investment resources away from their most productive uses and hence, hamper economic efficiency. In addition, the positive contribution to growth of those talented individuals who become tax lawyers and accountants is not only lost, but is perverted as their talents are unintentionally turned in the opposite direction.

The impact of higher taxes on productive work and investment is even more obvious. A rise in tax rates discourages certain groups from working at all. For low-income individuals the loss of welfare benefits that results from moving to higher income levels acts to discourage legitimate, productive work. Likewise, when the wife or husband of a higher-income household finds that any modest income earned is taxed at the highest rates, entry to the job market is discouraged. Also, higher taxes can reduce the hours worked as individuals find an evening at home more attractive than overtime income that is taxed at a higher rate.[4] For instance, resources can be misallocated when an accountant finds it more attractive to paint his house in his spare time than to provide additional accounting services. This decision results from a compounding effect of higher taxes, which in the first instance causes any additional income earned by providing accounting services to be taxed at a higher rate, and second, causes the professional painter to demand a higher pre-tax fee. When accountants are painting their own houses, painters are fixing their own cars, and mechanics are doing their own accounting, resources are being misallocated and a nation's efficiency is hampered.

As tax rates rise, the incentive to avoid those rates increases. Lower income individuals tend to work "off the books" or in what is now referred to as the underground economy. While the immediate economic benefits of this activity probably exceed the costs, the difficulty or inability to advertise and expand, as well as the disdain for the law promoted by such activity, prevents the underground economy from being viewed as a positive factor.

No responsible economist doubts the potential for high tax rates to damage incentives to save and produce. The major disagreement among economists is with respect to how high taxes have to go before these destructive tendencies become significant. The first step toward addressing this issue is to determine the behavior of effective marginal tax rates.

Measuring Effective Marginal Tax Rates

Much of the empirical analysis of marginal tax rates has centered on the marginal rates as reported in the tax tables. As such, tax cuts are considered to have occurred whenever tax legislation is changed. There are several problems with this view. First, even the highest tax rates may do very little damage if only a small amount of income is affected. Second, as inflation or real growth boosts income, individuals move into higher tax brackets. Therefore, an effective increase in tax rates may occur even though the tax tables remain unchanged.

At the Harris Bank, we have developed various estimates of effective marginal tax rates. Our figures incorporate data on household income as reported by the Internal Revenue Service. The first step in developing these estimates was to establish hypothetical households whose relative position among their fellow taxpayers remained unchanged over time. The income levels of two such households were identified, one whose position was at the 70th percentile and another whose position was at the 95th percentile. By definition, the 70th percentile represents a hypothetical household whose taxable income was larger than 70 percent of all households, but lower than the remaining 30 percent. The 70th percentile household represents a useful delineation since slightly more than half of all taxable income is earned by the top 30 percent of all households. Approximately 15-20 percent of all taxable income is earned by the top 5 percent of households. As a result, the effective marginal tax rates for these households encompass an overwhelming proportion of funds potentially available for savings and productive investment.

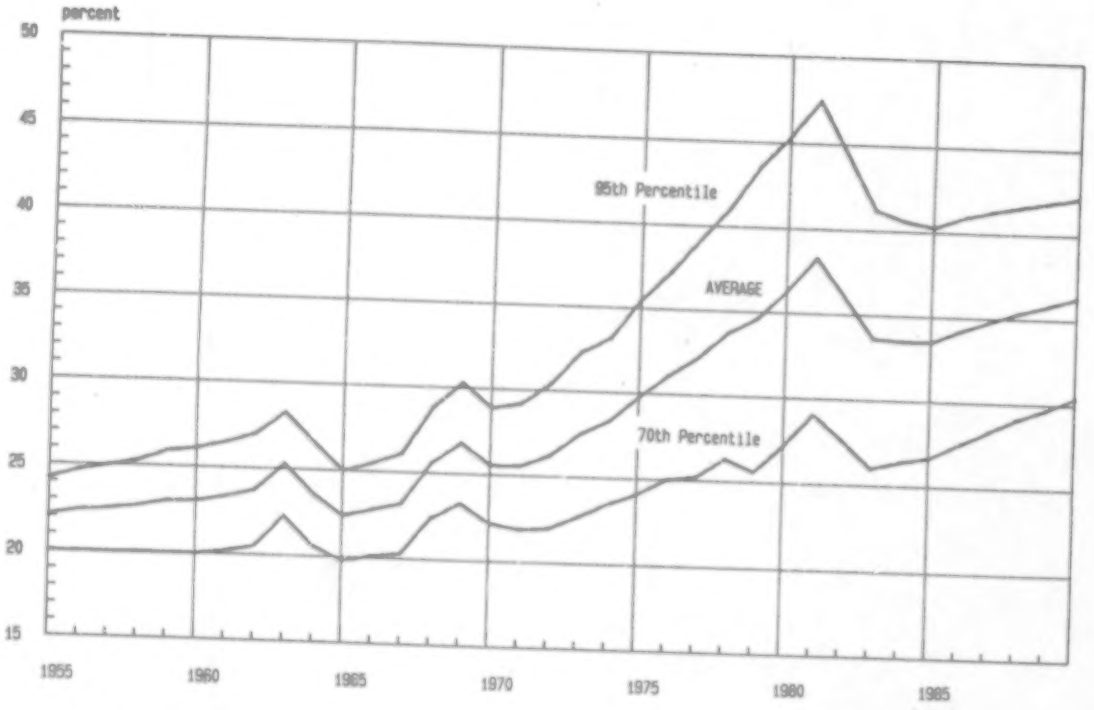
Next, the tax tables for each year were used to determine the marginal tax rates actually paid by individuals whose relative position among taxpayers remains unchanged year after year. Rather than have discrete jumps in tax rates as higher tax-bracket thresholds were attained, we interpolated within brackets to allow for smoother changes. One potential difficulty with our approach is the use of taxable income instead of gross income. In moving from gross to taxable income, individuals shelter income. Whether by the use of tax-free bonds, tax shelters, or other deductions, the process of shifting assets to reduce tax rates leads to a less efficient, less productive use of those assets. Unfortunately, there is no way to explicitly quantify the amount of money being sheltered or its negative effect on productivity. Still, since the amount of gross income sheltered should rise as rates on taxable income increase, these effective tax rates should serve as an excellent proxy for the potential economic damage to incentives and for the misallocation of resources that results from sheltering income.

At the time of our study, the latest available data on taxable income were for 1980. Subsequent to that, estimates of income growth and changes in tax rates were needed to estimate effective tax rates. A discussion of these estimates is presented in the appendix. For many purposes it is useful to have a single series on effective marginal tax rates. Such a series was developed by averaging the rates for the two household groups. The resulting series (see Table I) captures the upward drift in tax rates faced by the 70th percentile group as well as part of the upward explosion in rates at the 95th percentile level.

Recently, a pathbreaking study by the National Bureau of Economic Research (NBER) succeeded in providing the first comprehensive historical series on marginal tax rates for individuals for the period from 1916-80.[5] The NBER study presents a series of "average" marginal tax rates, which are marginal tax rates weighted by either gross income or the number of tax returns. In the end, the "average" concept limits our ability to observe the movement in tax rates on particular groups. For example, the NBER series on "average" marginal tax rates increases by approximately 30 percent from 1960-80; this is similar to the Harris series on marginal rates for a 70th percentile taxpayer whose rates increased 36 percent over the same period. However, the real action came in the 95th percentile where rates increased 74 percent! Since the NBER study does not specifically measure rates above the "average," the series fails to depict the extreme changes in progressivity for higher income individuals. Nonetheless, the basic pattern of the NBER tax rate series is similar to the Harris series during the 1960-80 period. Furthermore, the average of the Harris' marginal tax rates series, which produces a marginal tax rate for individuals between the 70th and 95th percentiles of taxable income, captures the same basic pattern of the NBER series as well as the impact from the greater progressivity of the tax structure. Charts I and II show the behavior of the various estimates of effective marginal tax rates.

CHART I

MARGINAL PERSONAL TAX RATES



Tax rates on additional income paid by a married couple filing jointly with income in approximately the 70th percentile and the 95th percentile of taxable returns.

Source: Harris Bank

HARRIS BANK

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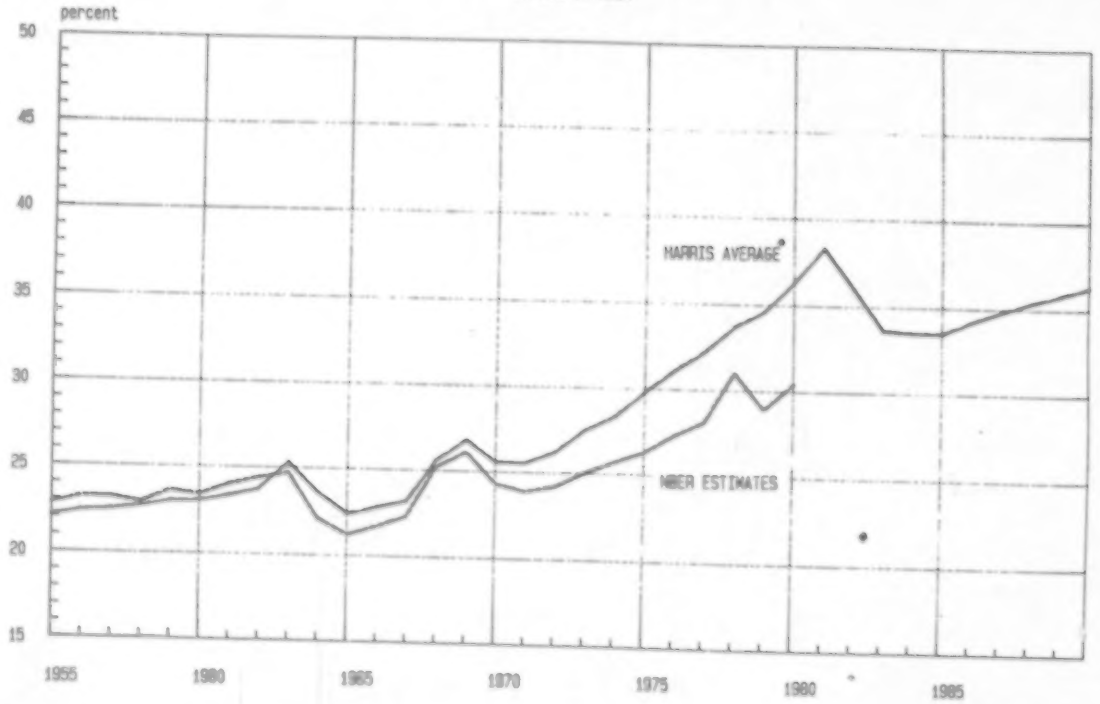
CHART II

MARGINAL PERSONAL TAX RATES

HARRIS vs NBER



* Average of the 70th percentile and the 95th percentile of taxable returns.

Source: National Bureau of Economic Research; Harris Bank

HARRIS BANK

Productivity Trends

To assess the impact of taxes on the nation's productivity performance, it is important to begin by observing the historical behavior of productivity. Two major problems complicate such a task. First, productivity figures represent a very crude measure for the economic concept of efficiency. As with most economic data, they can be used only as a rough guide. Second, the productivity numbers are strongly influenced by cyclical developments. To capture the underlying or structural trend it is important to remove as much of the cyclical impact as possible.

The basic productivity series used throughout this report is defined as real output per hour worked in the private nonfarm economy, as reported by the U.S. Bureau of Labor Statistics. The analysis excludes the farm economy because of potential weather-related distortions to farm output. Although the productivity data used are only indirect measures for the concept of economic efficiency, they appear to do a reasonably good job of reflecting changes in the underlying health of the economy.

In order to remove as much of the cyclical impact as possible, productivity growth trends were established between comparable stages of various business cycles. For example, if capacity utilization in manufacturing were similar in the first quarter of 1959 and the middle of 1962, then the productivity trend between those two points should eliminate the impact of cyclical factors. Such periods of comparison are shown in Table II. The estimated structural productivity trends obtained were combined to produce one series with growth rates as consistent as possible to each of the ten intervals. Chart III shows this series on structural productivity trends and compares it to the actual productivity series. Since the late 1950s and early 1960s, the structural productivity series appears to change its trend nine times.

Measuring the Impact of Taxes on Productivity Performance

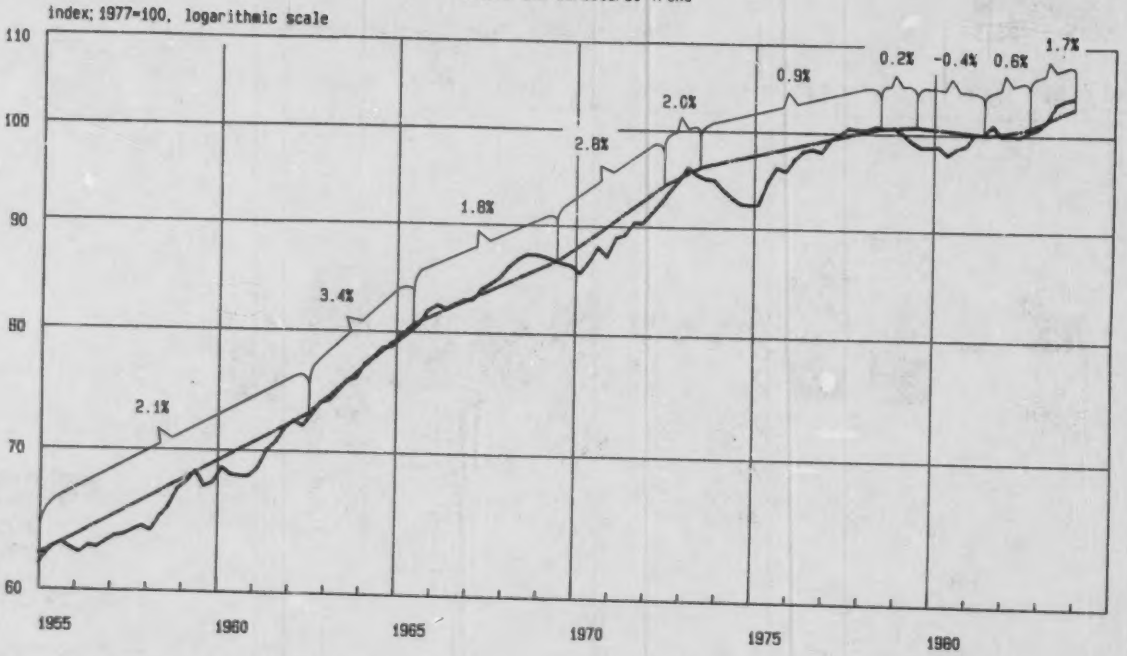
Chart IV shows the changes in noncyclical (or structural) productivity trends. It also shows the changes in the Harris series for effective marginal tax rates. In each of the nine instances when the structural productivity trend changes, tax rates changed in the opposite direction. A weighted average of the ratios for the changes since the 1950s suggests that a 1.0 percentage point change in effective marginal tax rates has been associated with a 0.33 percentage point change in the opposite direction in the economy's productivity trend.

This relationship suggests that the tax cuts from the Economic Recovery Tax Act of 1981 should have improved the economy's structural productivity trend by 1.6 percentage points per year. An alternative estimate of structural productivity suggests that the trend may have improved by 2.1 percentage points. If these estimates are correct they suggest that the bulk of the improvement in structural productivity can be attributed to the 1981-84 tax cuts.

CHART III

PRODUCTIVITY

Actual and Structural Trend



Productivity defined as output per hour of all persons in the nonfarm business sector.

Brackets show long-term growth trends.

Source: Bureau of Labor Statistics; Harris Bank.

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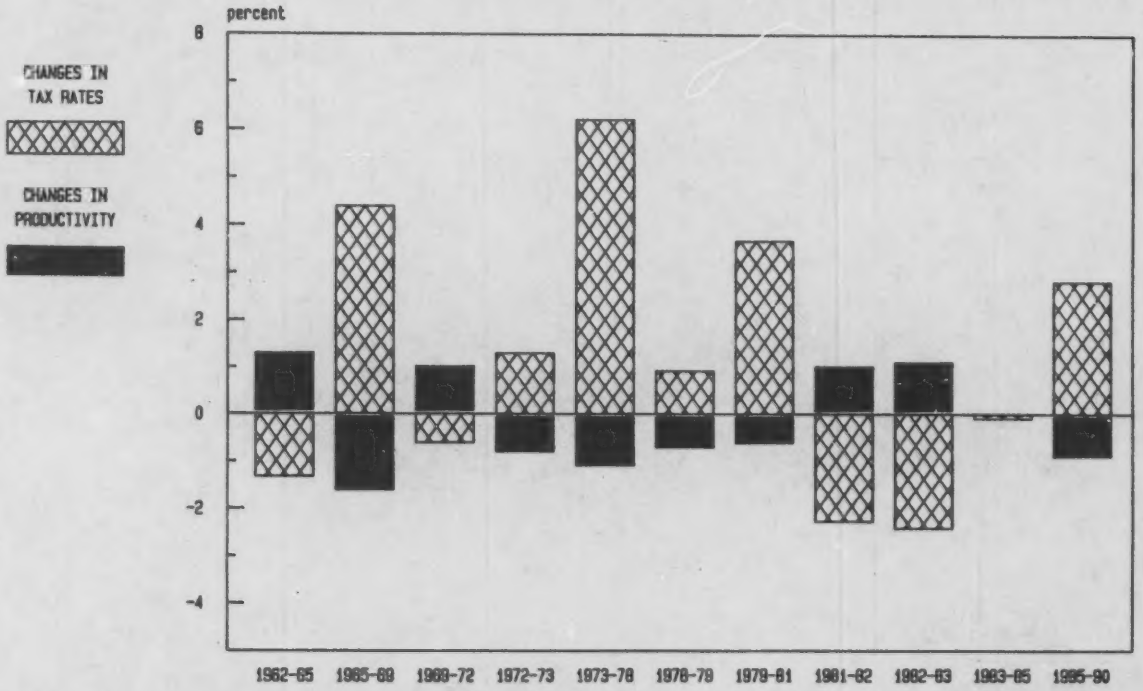
CHART IV

CHANGES IN TAX RATES and PRODUCTIVITY



Tax changes are differences in effective marginal rates.

Productivity changes are differences in structural trends.

Source: Bureau of Labor Statistics; Harris Bank

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The most disturbing element in this entire analysis is the implication for the late 1980s. Under present tax legislation effective marginal tax rates are estimated to rise by 2.8 percentage points between 1985 and 1990. Such an increase could lower productivity growth by approximately 1 percentage point from its present trend. Barring other factors, this change would return the economy to the poor productivity performance and associated malaise that characterized much of the 1970s. By 1990, the economy would be producing approximately $180 billion (1984 dollars) per year less goods and services than it would if the present productivity trend continued. This amounts to about $3,000 for the average family.

Viewed from a more positive perspective, a reduction in effective marginal tax rates holds the potential for an improvement in productivity performance. Past experience suggests that a tax which lowers the effective marginal tax rate to 23 percent (an estimated 10 1/2 percentage point reduction in rates from present levels) could be expected to raise productivity substantially. Even if the responsiveness in productivity is only half as great as past relationships suggest, a drop in effective marginal tax rates of this magnitude would still lead to a "golden age" of prosperity during the late 1980s.

[1]Smith, Adam, The Wealth of Nations, (Modern Library Edition, 1937), p. xliii.

[2]Fullerton, Don, "On the Possibility of an Inverse Relationship Between Tax Rates and Government Revenues," Journal of Public Economics, Vol. 19, No. 1, October, 1982, pp. 3-22.

[3]See for example, Fullerton, Don and King, M.A., eds., The Taxation of Income From Capital: A Comparative Study of the U.S., U.K., Sweden, and West Germany, Chicago: University of Chicago Press, forthcoming; Fullerton, Don, "Which Effective Tax Rate?" NBER Working Paper No. 1123, May, 1983.

[4]Hausman, Jerry, "Labor Supply," in H.J. Aaron and J.A. Pechman, eds., How Taxes Affect Economic Behavior, (Washington, D.C.: Brookings Institution, 1981), pp. 27-72.

[5]Barro, Robert J., and Sahasakul, Chaipat, "Measuring the Average Marginal Tax Rate From the Individual Income Tax," National Bureau of Economic Research, January, 1983, Working Paper No. 1060.

Appendix

Assessing changes in tax rates given the timing of the individual tax cuts for 1981 through 1984 was an interesting challenge. Since individuals pay taxes on calendar year income, the timing of each year's tax reduction affected the tax rate for that calendar year. For example, in 1981 individual tax rates were cut by 5 percent as of October 1. Since the reduction applied to only three months or one quarter of the year, the actual reduction over the entire calendar year amounted to only 1 1/4 percent or one fourth of the 5 percent cut. For 1982, the calculation is complicated by the fact that tax rates at the beginning of the year were already cut 3 3/4 percent from the levels for 1981. Tax rates were scheduled to decline a further 10 percent on July 1, 1982. Since the additional cut applied to only half of the calendar year, it represented a 5 percent additional reduction when spread over the entire year. Hence, the total cut in tax rates for 1982 was 8 3/4 percent from the levels of 1981. Going through a similar procedure reveals that the cut in tax rates for 1983 was a full 10 percent over 1982 and for 1984 the cut amounted to an additional 5 percent.

The assumed increases in income and the reductions in tax rates produce an interesting pattern of tax changes significantly different from the changes that most observers assumed had occurred. For 1981, the modest 1 1/4 percent tax cut was swamped as the increases in income pushed individuals into higher tax brackets. The precise changes in effective tax rates for 1981, as well as the tax cuts for 1982 and beyond depend on a taxpayer's income.

As incomes rise, tax brackets get significantly wider in both dollar and percentage terms. As a result of this particular structure, effective tax rates tend to rise more slowly for higher income taxpayers than for lower income groups. Finally, it is interesting to note that under the tax laws existing in 1983, effective tax rates will automatically rise beginning in 1985 despite the fact that tax brackets are scheduled to be adjusted for the impact of inflation. Since there is no indexing for real gains, effective tax rates will continue to rise as real gains in income push taxpayers into higher brackets. Assuming increases in real income, eventually all taxpayers would be in the 50 percent tax bracket.

Table I

Effective Marginal Tax Rates

Year	Harris Series[1]	National Bureau of Economic Research Series[2]
1954	21.80	22.2
1955	22.10	22.8
1956	22.35	23.2
1957	22.50	23.2
1958	22.65	22.9
1959	22.95	23.6
1960	23.05	23.4
1961	23.35	24.0
1962	23.75	24.4
1963	25.30	24.7
1964	23.60	22.1
1965	22.40	21.2
1966	22.80	21.7
1967	23.20	22.3
1968	25.60	25.2
1969	26.80	26.1
1970	25.55	24.3
1971	25.55	23.9
1972	26.20	24.2
1973	27.50	25.0
1974	28.35	25.7
1975	29.80	26.3
1976	31.10	27.3
1977	33.20	28.1
1978	33.70	31.0

Year	Harris Series	NBER Series
1979	34.60	28.9
1980	36.30	30.4
1981	38.30	NA
1982	36.00	NA
1983	33.60	NA
1984	33.50	NA
1985	33.50	NA
1986	34.20	NA
1987	34.80	NA
1988	35.35	NA
1989	35.80	NA
1990	36.30	NA

[1]Simple average of marginal tax rates for 70th and 95th percentiles.

[2]Arithmetic average weighted by adjusted gross income in each individual income class.

Table II

PRODUCTIVITY TRENDS
(Annual Rates of Change—Private Nonfarm)

Periods of Similar Capacity Utilization	Manufacturing Capacity Utilization Beginning and End of Period	Productivity Beginning and End of Period	Productivity Trend
1954-60	80.1-80.1	60.38-68.28	2.1
1959^{I}-62^{M}	81.4-81.5	67.60-72.45	2.1
1955^{M}-65^{M}	87.5-89.7	63.05-80.35	2.5
1964^{IV}-69^{III}	86.5-86.6	78.70-86.40	2.0
1968^{I}-69^{I}	87.1-87.3	86.00-87.10	1.3
1963-72	83.5-83.5	75.18-93.03	2.4
1965^{M}-72^{E}	89.7-86.6	80.35-95.40	2.3
1972^{E}-78^{E}	86.6-86.9	95.40-100.40	0.9
1977^{I}-81^{I}	80.9-80.6	99.30-100.10	0.2
1981^{III}-83^{E}	80.3-80.0	101.10-104.6	1.4

I, II, III, or IV refers to the respective quarter of the year.
M refers to the middle of the year.
E refers to the end of the year.

Table III

CHANGES IN PRODUCTIVITY TRENDS AND MARGINAL TAX RATES
(annual rates)

	(1) Productivity Trends	(2) Change in Productivity Trend	(3) Marginal Tax Rates Beginning to End	(4) Change in MTR	(5) Change MTR/Change Productivity (4)/(2) = (5)
1954-62	2.1		21.80-23.75		
1962-65	3.4	1.3	23.75-22.40	-1.35	-1.04
1965-69	1.8	-1.6	22.40-26.80	4.4	-2.75
1969-72	2.8	1.0	26.80-26.20	-0.6	-0.60
1972-73	2.0	-0.8	26.20-27.50	1.3	-1.63
1973-78	0.9	-1.1	27.50-33.70	6.2	-5.64
1978-79	0.2	-0.7	33.70-34.60	0.9	-1.29
1979-81	-0.4	-0.6	34.60-38.30	3.7	-6.17
1981-82	0.6	1.0	38.30-36.00	-2.3	-2.30
1982-83	1.7	1.1	36.00-33.60	-2.4	-2.18
1983-85	1.7	0.0	33.60-33.50	-0.1	-3.0*
1985-90	0.8	-0.9	33.50-36.30	2.8	-3.0*

*Historical average.

Senator GRASSLEY. Dr. Rahn.

STATEMENT OF DR. RICHARD W. RAHN, VICE PRESIDENT AND CHIEF ECONOMIST, U.S. CHAMBER OF COMMERCE, WASHINGTON, DC

Dr. RAHN. Thank you, Mr. Chairman. I'm Richard Rahn, vice president and chief economist of the Chamber of Commerce of the United States. I applaud your efforts for holding these hearings today.

The quantity and quality of America's rate of capital formation has declined relative to past trends. This has been an important contributing factor in the sharply reduced rate of productivity growth. The reasons for this disquieting trend are very complex and related to a number of factors that occurred during the past decade. The most important factor was a tax system that became increasingly hostile to income from capital.

As inflation accelerated, inadequate depreciation allowances and over-statement of net income due to illusory inventory profits led to excessive corporate income taxes. During most of the 1970's, the effective corporate income tax rate exceeded 50 percent. Moreover, high personal income taxes discouraged personal saving and traditional forms of financing investment. Thus, the economy was deprived of the funds needed to finance increased capital investment.

Tax disincentives—especially high marginal tax rates and the excessive taxation of income from capital—adversely affected work, the desire to save and invest. In light of these unfavorable conditions, the U.S. Chamber of Commerce enthusiastically endorsed and worked for passage of the Economic Recovery Tax Act (ERTA) in 1981, in the belief that the tax rate reductions it contained would lead to a substantial increase in capital formation and, concomitantly, to an improved productivity growth record. Stated differently, the best tax incentive is a reduction in tax disincentives.

Recent data suggest strongly that America is witnessing a rebound in economic growth and productivity performance reminiscent of what transpired after the Kennedy tax cuts of the early 1960s. Certainly the simultaneous increase in both productivity and real incomes over the past year must be viewed as more than mere coincidence. An important ingredient in this rebound has been the size and strength of capital formation.

As a result of ERTA, business has invested in productivity-enhancing equipment to a much greater extent during this recovery than in any of the recoveries of the past three decades. In the first four quarters of the current recovery, investment in producers' durable equipment increased 18.3 percent. This was nearly four times the average rate of increase recorded in the last three recoveries. Because of this increased investment, manufacturing productivity in 1983 rose by 6.5 percent, about half again the rate of increase following the recession of 1973–75, and more than the combined increase of the last 5 years.

In addition, real business investment in plant and equipment did not decline as much during the 1981–82 recession as it had in the seven previous post-war recessions. This is a direct result of the enactment of the Accelerated Cost Recovery System.

With respect to tax policy, there are a number of steps the Government can take or refrain from taking to encourage capital formation. Specifically, the Senate is to be commended for rejecting the move to postpone tax indexing, which is vitally important to the future of the Nation's economy. Indexing will forestall the bracket creep that would all too soon wipe out real tax reforms.

Second, and related to tax indexing, low marginal tax rates, both personal and corporate, are imperative to continued productivity improvements and economic growth.

Third, high capital recovery allowances are important to corporate cash flow and to higher rates of capital formation.

Fourth, Congress should lower the maximum rate on capital gains or, at the very least, maintain the present minimum rate of 20 percent.

Fifth, the R&D tax credit must be retained beyond its expiration date next year. It is now more widely understood that America's technological leadership is not as commanding as it once was, and that greater R&D efforts are needed in the years ahead. R&D tax credits reduce the cost of private R&D while leaving market incentives and the private selection of projects unaffected.

At bottom, the issue is: should we adopt policies more favorable to capital formation? Certainly a strong case could be made that we should. Government should do more to encourage economic growth, or at least less to impede it.

The position of the United States in the world economy would be stronger today if we had paid more attention in the past to the policies that encourage capital formation. The enactment of ERTA was a step in the right direction, but more needs to be done.

Specifically, if we are serious about increasing productivity to insure higher rates of capital formation or higher real economic growth so that all of our citizens will have a more prosperous future, we must reduce the growth rate of Government spending to minimize the crowding out of the private sector. In addition, we must further reduce high marginal tax rates on work, saving and investment, and reduce regulatory impediments on productive activity that are not fully justified in terms of cost-benefit analysis. And, finally, we must modify our monetary policies to ensure price stability.

Thank you, Mr. Chairman.

[The prepared written statement of Dr. Rahn follows:]

STATEMENT
on
THE IMPACT OF THE TAX SYSTEM ON PRODUCTIVITY AND ECONOMIC GROWTH
before the
SUBCOMMITTEE ON OVERSIGHT OF THE INTERNAL REVENUE SERVICE
of the
SENATE FINANCE COMMITTEE
for the
CHAMBER OF COMMERCE OF THE UNITED STATES
by
Dr. Richard W. Rahn
April 13, 1984

I am Richard W. Rahn, Vice President and Chief Economist for the Chamber of Commerce of the United States. On behalf of the Chamber's more than 200,000 business, trade association and local and state chamber members, I welcome this opportunity to present our views on the impact of the tax code on America's productivity performance and to share with you our recommendations for improving productivity growth through changes in tax policy.

Summary

o Increased capital formation is absolutely necessary to increase productivity and economic growth.

o Tax rate cuts and faster depreciation under ERTA contributed significantly to the robust recovery from the 1981-1982 recession.

o Significantly, the net effect of these tax reforms has been to increase the cash flow for corporations.

o Most funds for capital investment are generated from the internal cash flow of corporations, rather than from the marketplace. (Since ERTA, internal cash flow finances over 75 percent of corporate capital outlays, compared with 58 percent in the decade before ERTA.)

o To raise taxes on corporations, in the mistaken belief that it will reduce the federal deficit, will lessen corporate cash flow, reduce capital formation, and ultimately lower the real incomes of our citizens.

o Government can encourage capital formation by: retention of the tax indexation reform, which eliminates tax rate creep; lowering personal and corporate marginal tax rates; maintaining high capital recovery allowances; reducing the maximum rate on capital gains; and, continuing the R&D tax credit.

Capital Formation And Productivity

The most common measure of productivity is output per man hour, the growth of which depends primarily--but not entirely--upon the amount of capital used per hour of work. Man has sometimes been referred to as the "tool-using animal," and the use of more tangible capital per worker, of increasingly better quality, has long been recognized as an important contributor to the growth of labor productivity. A more comprehensive definition--output per unit of labor and capital inputs (the latter of both the tangible and intangible variety), or multifactor productivity--is unaffected by the substitution of capital for labor, but recognizes the major contribution of tangible capital to output growth.

In the early 1970's, a number of economists and public and private sector policy-makers were turning their attention to the determinants of productivity growth in an effort to better understand the sources of economic growth and to develop public policies conducive to a rapidly rising standard of living. While there was no single cause for America's disappointing productivity performance, an important part of the problem related to the slow growth in U.S. capital investment in new plants, equipment and technology. A few statistics illustrate the point. The growth of output per man hour decreased sharply during the period 1973-1981, declining to only 0.8 percent per year, as compared to 3.0 percent growth during the period from 1948-1973. Capital continued to grow over the more recent period, averaging 1.8 percent

per year, but this was substantially less than the yearly 2.8 percent increase in capital over the earlier period. Put another way, the slower growth in the capital/labor ratio raised output per man hour by less during 1973-1981 than it had from 1948-1973. There was, also, essentially no increase in multifactor productivity from 1973-1981--0.1 percent yearly--as compared to 2.0 percent per year from 1948-1973. Here again, the decline in the growth of capital was an important contributing factor.

In a related vein, technological advances are widely recognized as a major determinant of economic growth, productivity improvement and the demand for investment, though these relationships are exceedingly complex and, in many areas, the stock of knowledge remains limited and inadequate. Changes in the quality and quantity of research and development expenditures impact heavily upon the quality or productivity of capital stock (and of labor, and therefore of multifactor productivity). Or, put more simply, increases in research and development enhance the effectiveness of capital investment and the efficiency of manufacturing processes and lead to the introduction of new products. Having said this, however, data covering the past two decades show that R&D spending declined from 2.7 percent of GNP in 1961 to 2.3 percent in the early 1970's, and has increased only modestly in recent years. While the civilian R&D/GNP ratio has been rising slightly over the same period, from 1.2 percent to 1.6 percent, the most recent increases have been the result of a greater emphasis on energy. (Important also is the fact that two of our major trading partners, Japan and West Germany, have been devoting a larger portion of their respective GNP's to civilian R&D, which may be the key explanation for their superior productivity performances compared to our own.) The economic environment of the past decade was, in many respects, unfavorable to risk-taking, longer-term commitments, capital formation and research and development--all of which are critical to improved productivity performance.

It was clear, then, that the quantity and quality of America's rate of capital formation had declined relative to past trends, and that this had been an important contributing factor to our sharply reduced rate of productivity growth. The reasons were many and complex and related to a number of factors

that occurred during the last decade. Chief among them was a tax system that became increasingly hostile to income from capital. As inflation accelerated, inadequate depreciation allowances and an overstatement of net income resulting from illusory inventory profits led to excessive corporate income taxes. During most of the 1970's, the effective corporate income tax rate exceeded 50 percent. Moreover, high personal income taxes discouraged personal saving and traditional forms of financial investment, thus depriving the economy of the funds needed to finance increased capital investment.

These factors are, of course, all interrelated, but in sum, tax disincentives-- especially high marginal tax rates and the taxation of income from capital --adversely affected work efforts, saving and investment. Thus the Chamber enthusiastically endorsed and worked for the Economic Recovery Tax Act (ERTA) in 1981 in the belief that tax rate reductions would lead to a substantial increase in capital formation and, concomitantly, to an improved productivity growth record. Stated differently, the best tax incentive is a reduction in tax disincentives.

Post ERTA: A Review Of The Evidence

Many people dismissed the effectiveness of the ERTA tax cuts before there was sufficient evidence available to determine their impact on incentives to work, save and invest. The reality of ERTA was that not all of its provisions took effect immediately, and those that did were hampered by the recession that began in July of 1981. ERTA cut taxes 1 1/4 percent in 1981, 8 3/4 percent in 1982, 10 percent in 1983 and 5 percent in 1984. Having finally realized its full benefits, we must look at the impact of the tax law changes from the perspective of tax year changes in order to measure ERTA's impact on the economy.

What has been the result? Recent data suggest strongly that America is witnessing a rebound in economic growth and productivity performance reminiscent of what transpired after the Kennedy tax cuts of the early 1960's. Certainly the simultaneous increase in both productivity and real

incomes over the past year must be viewed as more than mere coincidence. An important ingredient in this rebound has been the strength of capital formation.

The change in the depreciation system allowed business to write off equipment at a much faster rate than was previously the case. ERTA replaced previous depreciation rules with greatly simplified rules under which all property is classified as three, five, ten or fifteen year property. Three year property received a six percent Investment Tax Credit (ITC) and other property a ten percent ITC. (In 1982, the basis adjustment in the Tax Equity and Fiscal Responsibility Act, TEFRA, reduced the value of the ITC to approximately 4 percent and 8 percent for three and five year property, respectively.)

It now appears that the best recovery in over three decades in business fixed capital investment has been triggered by the changes in the tax laws that have resulted in current year depreciation charges exceeding actual depreciation by over $32 billion. The faster depreciation allows funds to be charged against revenues in arriving at taxable earnings. This results in lower reported taxable income and, therefore, significantly lower taxes, but it also results in higher cash flow for corporations. By contrast, the depreciation allowances in effect prior to the passage of ERTA resulted in an overstatement of profits, because inflation caused depreciation to be understated in relation to the replacement costs of the capital being depreciated. The cost of remaining in business was not fully taken into account in the tax laws.

As a result of ERTA, business has invested in productivity-enhancing equipment to a much greater extent during this recovery than in any of the recoveries of the past three decades. In the first four quarters of the current recovery, investment in producers' durable equipment increased 18.3 percent. This was nearly four times the average rate of increase recorded in the last three recoveries. Because of this increased investment, manufacturing productivity in 1983 rose by 6.5 percent, about half-again the rate of increase following the recession of 1973-1975, and more than the combined increase of the last five years.

CHANGES IN REAL GNP

	IV/82 to IV/83		Average of three previous recoveries*	
	Billions of 1972 dollars	Percent	Billions of 1972 dollars	Percent
Real GNP	$89.8	6.1%	$60.8	5.0%
Gross private domestic investment	64.1	35.9	27.3	16.7
Nonresidential fixed	18.4	11.5	5.2	3.7
Producers' durables	19.8	18.3	4.3	4.7

* IV/70-IV/71, I/75-I/76, and II/80-II/81

Source: National Economic Trends, January, 1984, Federal Reserve Bank of St. Louis

In addition, real business investment in plant and equipment did not decline as much as it had in the seven previous post-war recessions. This is a direct result of the enactment of the Accelerated Cost Recovery System (ACRS).

	REAL BUSINESS FIXED INVESTMENT		REAL INVESTMENT IN STRUCTURES	
Quarter After Peak	Average of Seven Postwar Recessions	Last Recession	Average of Seven Postwar Recessions	Last Recession
1	- 2.0%	+ 0.2%	- 1.8%	+ 1.5%
3	- 6.4%	- 4.1%	- 3.4%	+ 2.2%
5	-14.2%	- 7.5%	-19.4%	- 0.4%

ERTA also contained a 25 percent tax credit for incremental R&D, available from July 1, 1981 and set to expire December 31, 1985. The tax credit is 25 percent of the amount by which current R&D exceeds the average amount of R&D spending over the previous three years. This credit has led to increases in the amount of research and development and may have prevented firms during the recent recession from reducing their expenditures in this area by as much as might be expected. Between 1981 and 1983, the amount spent on R&D by American industry grew by more than 25 percent. Such increases will result in the enhanced competitiveness of American industry in the years ahead.

Internal Financing: The Key To Capital Investment

The size of current and prospective budget deficits and the spectacle of large scale government borrowing has led to the belief that private investment will be crowded out and business firms will not have the necessary capital to expand and renew their capital stock. On the surface this makes sense. With the government preempting a large supply of capital, there would be less left to other participants in the capital markets.

The fact is, however, that most funds for capital investment are not raised in the credit markets--that is, most firms do not go into the marketplace to borrow funds for either business expansion or renewal. Since the passage of ERTA, the internal cash flow of the corporation finances over 75 percent of corporate capital outlays. This compares with an average of only 58 percent in the ten years prior to ERTA.

With this fact in mind, raising taxes on corporations in an attempt to lower the federal budget deficit will actually reduce corporate cash flow and thus inhibit capital investment. Even in the worst of times, business finances most of its capital outlays from internal rather than external cash. It follows, therefore, that any action that would reduce corporate cash flow would tend to reduce capital outlays. Significant too is the fact that a large portion of the funding for capital outlays for nonfinancial corporations that does not come from retained earnings is generated by the sale of stock. This is a market for funds that one would have to believe attracts a different investor than those interested in investing in government bonds. The government deficit therefore does not interfere with those firms going into the capital market for equity rather than debt financing. In addition, the reduction in the capital gains rates to a 20 percent maximum has resulted in a new willingness on the part of investors to go into unseasoned new stock issues, of which $10 billion were issued last year. This was more than three times the quantity issued in any previous year.

Recent Tax Changes Affecting Capital Formation

The Tax Equity and Fiscal Responsibility Act (TEFRA) contained many important changes which adversely affected business investment and cash flow. Promoted as a "loophole-closing" measure, TEFRA has had a severe impact on business. Nearly 60 percent of its revenue came from cutbacks on business, and these changes eliminated more than 70 percent of the tax reductions business received under ERTA. Investment was particularly hard hit, through provisions like the one-half basis adjustment, repeal of the 1985-1986 changes, reductions in the ITC, and elimination of safe harbor leasing. These changes undoubtedly led many firms to abandon their investment plans and surely contributed to a slower recovery in business fixed investment than would otherwise have been the case.

Those who would debate this point fail to realize the impact tax law changes, both in terms of frequency and severity, have on business confidence. The tax law has undergone many changes over the past seven years--sometimes, several major changes in one year. Business has often seen tax cuts enacted and then rescinded within the year. This sort of activity makes it difficult to plan and makes every tax reduction suspect. Many businesses choose not to take advantage of new "incentives" because they expect the "advantage" to soon disappear. Tax incentives, then, are often rendered less effective by the uncertainty caused by frequent and contradictory policy changes.

Recommendations For Tax Policy

With respect to tax policy, there are a number of steps government can take (or refrain from taking) to encourage capital formation. A short and fairly immediate list is provided below.

o The Senate is to be commended for rejecting the move to postpone tax indexing, which is vitally important to the future of the nation's economy. Indexing will forestall the bracket creep that would all too soon wipe out real tax reforms.

o Second, and related to tax indexing, low marginal tax rates, both personal and corporate, are imperative to continued productivity improvements and economic growth.

o Third, high capital recovery allowances are important to corporate cash flow and to higher rates of capital formation.

o Fourth, Congress should lower the maximum rate on capital gains or, at the very least, maintain the present maximum rate of 20 percent.

o Fifth, the R&D tax credit must be retained beyond its expiration date next year. It is now more widely understood that America's technological leadership is not as commanding as it once was, and that greater R&D efforts are needed in the years ahead. R&D tax credits reduce the cost of private R&D while leaving market incentives and the private selection of projects unaffected.

At bottom, the issue is: should we adopt policies more favorable to capital formation? Certainly a strong case can be made that we should. Government should do more to encourage economic growth, or at least less to impede it. Some of the factors that enabled the United States to have moderately rapid growth in the earlier post-war period did not work too well in the 1970's. In particular, a somewhat larger share of the inputs to production, both capital and labor, are today non-productive in the traditional sense--that is, they are used in ways that do not add to output as conventionally measured. Given the impact of greater competition from abroad, we cannot afford to be as careless about the effect of tax policy (and other policies) on capital formation as we were in decades gone by.

The position of the United States in the world economy would be stronger today if we had paid more attention in the past to policies that encourage capital formation. The enactment of ERTA was a step in the right direction, but more needs to be done.

Specifically, if we are serious about increasing productivity to ensure higher rates of real economic growth so that all of our citizens will have a more prosperous future, we must reduce the growth rate of government spending to minimize the crowding out of the private sector. In addition, we must further reduce high marginal tax rates on work, saving, and investment, and reduce regulatory impediments on productive activity that are not fully justified in terms of cost/benefit analysis. Finally, we must modify our monetary policies to ensure price stability.

Senator GRASSLEY. Dr. Paul Craig Roberts.

STATEMENT OF DR. PAUL CRAIG ROBERTS, THE WILLIAM E. SIMON FELLOW IN POLITICAL ECONOMY, CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES, WASHINGTON, DC

Dr. ROBERTS. Mr. Chairman, I submit my testimony for the record. I have a very brief opening statement.

I would like to congratulate you for holding hearings on tax policy and productivity. Productivity determines economic growth and living standards, and nothing is of more importance to our success as a Nation. As Prof. Larry Summers pointed out in a paper prepared for the White House Conference on Productivity last year, 1981 per capita output was $12,780 in the United States. Dr. Summers calculated that, had productivity growth contained at the 1948 to 1967 rate through 1981, output per capita would have been $16,128 in 1981, 26 percent higher than actual.

In recent times, productivity has suffered from bad tax law. All taxes act like a brake on production, but a progressive tax system such as the one in the United States particularly discourages additional work, saving, investment risk taking. It is as if the Government steps down harder on the brake when the economy tries to move forward. The interaction of the progressive tax system with inflation pushed many middle income earners into tax brackets that were previously inflicted only on the rich.

The 1981 tax reform was a first step in restoring healthy economic incentives to the tax system. Marginal income tax rates for individuals were lowered, and the Accelerated Capital Cost Recovery System permits businesses to more quickly write off their capital investments. Beginning next year, indexation of income taxes will stop inflation from pushing people into higher marginal income tax brackets.

The effects of the 1981 tax reforms can be seen in the strength of business capital spending in the current recovery. The latest data show that business capital spending has contributed about three times more to real GNP growth than is typical during the first year of recovery. Usually, capital spending does not come back until the second year of recovery. Its early arrival reflects the success of the 1981 supply-side tax reform and will help to maintain productivity and to ward off the capacity bottlenecks that lead to the resumption of inflation.

Tax systems that work against productivity are expensive for the country. A broad based, flat rate tax, especially one that exempted savings from the tax base, would restore the incentives sacrificed in the name of progressivity, and it would allow the United States to recapture high levels of productivity growth.

Thank you, Mr. Chairman.

[The prepared written statement of Dr. Roberts follows:]

Testimony before the Subcommitte on Oversight
of the Internal Revenue Service
Committee on Finance
U.S. Senate
April 13, 1984

by

Paul Craig Roberts
Center for Strategic and International Studies
Georgetown University

Taxes and Productivity

How a government taxes its people affects productivity and economic growth--the factors which ultimately decide living standards. Policymakers could preserve the current economic recovery and encourage the long-term prosperity of the United States if they altered the present tax system to allow for better incentives.

The most common measure of productivity is output per man-hour. This figure represents the contribution that the average individual worker makes to the gross national product (GNP) in one hour of work. As can be readily imagined, productivity is one of the greatest indicators of economic growth. For productivity to remain constant as the work force grows, the economy's output must grow at the same rate. Similarly, if the work force grows faster than output grows, productivity falls, and if output grows faster than the work force grows, productivity rises.

Productivity growth is important not only because it allows existing production processes to be completed more quickly and efficiently but also because it frees up labor and other resources for new uses. Farming in the United States is an excellent example of how productivity growth worked not only to increase existing economic growth potential but also to open the door for new opportunity. Today far fewer people produce far greater output. The Department of Agriculture's farm and productivity indexes show that total farm output per hour of farm

work rose from 9 to 119 over the 50-year period from 1929 to 1979 (see Table B-93, Economic Report of the President, 1984, p. 326). The enormous productivity gains in agriculture enabled the United States to produce much more food with far fewer people, and at the same time allowed many people to move into better paying jobs in manufacturing and industry.

There are many elements which help determine the level of productivity. Training and education of the work force is a big factor since a skilled person generally produces a higher-valued product than a non-skilled person. The amount of capital available to each worker and the cost of capital compared to the cost of labor are extremely important. How quickly and efficiently the private sector is able to invent and incorporate new modes of production is a big factor.

The government impacts on productivity through taxes and regulations. Since government decides the rules and regulations under which the private sector is to live, government is often a deciding factor in an industry's productivity performance.

Perhaps the most significant impact government has on productivity is in the area of taxation. Taxation is important because it affects virtually all the other ingredients which make up productivity. Under a progressive tax system such as that in the United States, additions to income are taxed at a higher rate than the average dollar of income. Because the additional income is taxed at progressively higher rates, the reward for earning income diminishes as more is earned. The progressive tax code discourages additional work, saving, investment and risk-

taking.

People have less incentive to undertake night classes or extra job training to improve their work skills if they do not expect to gain a worthwhile return on the additional investment in their human capital. Since taxes take such a big chunk out of take-home pay. employers have to pay higher pre-tax salaries, and have less left over to devote to building up their capital stock. Depreciation laws that understate investment costs and overstate corporate profits hit productivity with a double whammy. When book depreciation allowances are adjusted to a replacement cost basis, corporate profits were taxed at a higher rate than the statutory rate for more than a decade, averaging 56 percent in the 1970s and reaching 77 percent in 1974 (SEE TABLE I).

Inflation aggravated the effects of the progressive income tax. During the late 1960s and 1970s, bracket creep pushed people into higher income tax brackets despite the absence of any real income gains. The interaction of inflation with the progressive tax system produces an insidious form of tax increase because it is not voted.

As could be expected, productivity growth rates declined substantially during the 1970s. Annual productivity growth rates in the private business sector declined from an average of 3.1 percent from 1948-68 to 2.1 percent from 1968-1973 to 0.6 percent from 1973-80. The annual growth in output per worker actually declined in 1979, 1980, and 1982.

In a paper prepared for the White House Conference on Productivity in 1983, professor Larry Summers showed the connection between productivity growth and living standards. In

1981 U.S. per capita output was $12,780. Dr. Summers calculated that, had productivity growth continued at the 1948-67 rate during the 14 years following 1967, output per capita would have been $16,128 in 198--26 percent higher than actual.

Not only did U.S. productivity growth slow, but the growth is below that posted by our leading trading partners. International productivity data for the manufacturing sector prepared by the U.S. Department of Labor show a 1.7 percent rate of growth for the United States between 1973 and 1982 compared with 7.2 percent for Japan, 4.5 percent for France, 3.6 percent for the Federal Republic of Germany, 3.7 percent for Italy and 1.8 percent for the United Kingdom. Only Canada, with a 1.6 percent growth rate, lagged behind the United States.

The Economic Recovery and Tax Act of 1981 was the result of a bipartisan recognition in Congress that high marginal tax rates and inadequate depreciation allowances were undermining the vital components of productivity and economic growth in the United States. Unfortunately, the marginal income tax rate reduction and faster depreciation write-offs for business were not given an opportunity to work right away. The tax cut was back-loaded so that no real tax relief came in the first 18 months of the Reagan Administration. At the same time the Federal Reserve Board embarked on a course of extremely tight monetary growth.

Thanks to the 1981 tax reforms, the business sector held up better during this past recession than might have been expected. Given that the capacity utilization rate and the profit share of GNP hit postwar lows, capital spending in real terms declined

only a little more than it did on average in past recessions and not nearly as much as in the severe downturns of 1957-58 and 1973-75.

An even more telling fact comes from the performance of the one sector--real nonresidential construction--where the 1981 tax cut most escaped repeal in the 1982 tax bill. Throughout most of the recession, investment in structures remained well above its pre-recession level, instead of declining as it did in the seven previous cycles.

The most recent economic data indicate that the current recovery is not only strong but healthy. The sources of strength in the present recovery are well in line with those of average postwar recoveries, disproving fears that high interest rates would produce an "unbalanced" recovery. Contrary to predictions, above normal gains have been registered in the interest-sensitive areas of spending on consumer durables such as autos and appliances, as well as in housing and business capital spending. As a percentage of GNP growth in the first year of the recovery, spending on consumer durables was 24.9 percent compared with the 19.3 percent average for the five previous expansions. Business capital spending accounted for an astounding 21.9 percent of the growth in the first year of this recovery, compared with the past average of 7.6 percent.

The reasons for business capital spending's vigorous recovery are not hard to find. They include an exceptionally strong rebound in corporate profits and cash flow in 1983, and improved rates of return on investments due to those portions of the accelerated cost recovery system that were not repealed in

1982. The most recent surveys conducted by McGraw-Hill and the Department of Commerce of business plans for plant and equipment spending in 1984 indicate a rise in the range of 11-12 percent, 3-4 percentage points above the results of surveys conducted in late 1983. The latest surveys confirm the stronger readings posted by a number of other leading indicators of capital spending beginning last fall.

While it is good news to see that business capital spending, aided by the 1961 tax cut, is making a stronger than average comeback, business has a long way to go before recapturing its past position. Capital spending was severely depressed even before the most recent recession. Capital spending normally booms prior to cyclical downturns, but the economy had just begun to get back on its feet after the 1979-80 recession when it was hit with the 1981-82 recession. At any point in time, the stock of fixed capital reflects investment over a number of previous years. The relatively depressed rate of net capital spending during much of the 1970s and again following the 1979-80 recession is reflected in the sluggish growth in the real net capital stock.

Another factor contributing to the slow growth of the capital stock has been depreciation laws which, when combined with inflation, prohibited businesses from writing off their investment costs fast enough in order to provide for replacement of worn-out capital. Depreciation laws caused a gradual shift in the composition of business investment toward shorter-lived items which could be depreciated more rapidly. The Treasury Department

has estimated, based on service life assumptions used by the Commerce Department, that the average life of the items in business investment in 1982 was about three years shorter than in 1959.

To preserve the current economic recovery, boost productivity, and encourage the long-term prosperity of the United States, policymakers should adopt a broad-based flat-rate tax. A flat-rate tax, especially if it exempted saving from the tax base, would do more to restore productivity-building incentives to the U.S. economic system than any other change.

Any tax system should meet a minimum of three goals: it should be simple and fair, it should collect adequate revenues, and it should minimize its own burden on the economic vitality of the tax base. It is safe to say that our present tax system, despite the reforms of 1981, does not meet these goals.

Our present tax system can hardly be called fair. In fact, the progressive tax is based less on the principle of fairness than on the "ability to pay" argument. Fairness says that a person who earns twice the median income should pay twice as much in taxes. The ability to pay argument says that a person earning twice the median income should pay, for example, five times as much in taxes, simply because that person is better able to withstand the burden. The "ability to pay" argument respects the property rights of successful people less than the property rights of unsuccessful people; it is pure and simple discrimination.

The result of interaction between the progressive tax system and inflation indicates that the system is no longer even based

on the ability to pay argument. Bracket creep pushed many middle income earners into high marginal income tax brackets--spaces that used to be reserved only for the rich. As inflation and economic growth moved the population higher into the progressive tax system, the burden of disincentives on the economy rose.

The principle of fairness is further violated because different kinds of income are treated differently, as is marital status. People are encouraged to make investments that minimize their taxes rather than maximize their income. This is perverse and undermines the tax base.

The House Democratic Caucus could not have been more accurate when, in January 1984, they wrote in Renewing America's Promise: A Democratic Blueprint for our Nation's Future,

> The current tax code distorts investment decisions so that economically desirable investments often appear less attractive than those where tax incentives inflate profitability. Section after section tells new investors what lines of business to enter, tells existing corporations how to go about their work, and puts a heavy tax on the profits of successful and productive corporations. The whole system makes no economic sense (p. 15).

Collecting adequate revenue for the government cannot be achieved independently of the other two goals. If taxpayers feel that the system is unfair, they are more likely to engage in tax avoidance. The large underground economy that has developed in the United States is testimony that many Americans no longer believe that the tax system is worthy of support.

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The size and strength of the economy is the basis for the government's budget. The economy's strength determines how much the government must spend on such things as unemployment benefits, public housing and income support programs and how much it can spend on defense, education, and public investment in roads and bridges. Given a specific level of spending, the portion of GNP that the government requires to pay for it depends on the size of the GNP itself. Obviously, it is much easier for a government to "live within its means" if the economy is large, healthy and growing.

In a flat-rate system, marginal and average tax rates are the same, and the economic distortions that differential tax treatment cause are reduced to a minimum. By eliminating most of the deductions from the tax code and broadening the base, tax rates could be lower under a flat-rate system without any loss of revenue to the government. Under the present tax system, the only way some economic activities can survive is through loopholes or other special rules and exceptions. A low flat-rate tax system would not require the piecemeal efforts to boost productivity, encourage research and development, and increase capital formation that distort investment decisions. Activities would take place because they are profitable for economic reasons and not tax reasons.

Exempting saving from the tax base would add a big boost to investment and productivity. Over the years our society has become increasingly debt-dependent. This was partly by design, partly by accident. After World War II economists in the United States believed that it was the duty of the government to

maintain high levels of demand. Economists wrongly believed that the Great Depression was caused by an excess of saving, and policymakers were determined not to let a situation like that develop again. Consumer spending was encouraged to soak up what the government considered an excess of saving, and this was reinforced by tax law.

In the 1970s high inflation rates combined with government-imposed interest rate ceilings to yield negative real interest rates. People were actually paying to let somebody else use their money! In addition, taxes had to be paid on nominal interest earned, whereas interest payments on debt could be written off. For too many people, the government's policies represented an ultimatum: go into debt or go broke. Tax law that encourages debt over equity is source of high interest rates.

A nation of debt junkies was spawned and capital formation rates fell, dragging productivity and economic growth down with them. By exempting saving from the tax base policymakers could restore the incentive to save and invest and help to recover the lost ground.

Economic policymakers may be faced with an important opportunity. The healthy economic recovery that is underway is bound to give any positive reforms additional momentum. Now is the time to guarantee the future by fundamentally reforming the tax system.

Table 1
Effective Corporate Tax Rates

1960	54.1%
1961	53.4
1962	47.0
1963	46.2
1964	43.3
1965	42.0
1966	43.3
1967	43.3
1968	49.3
1969	53.8
1970	58.4
1971	53.6
1972	50.4
1973	55.9
1974	76.8
1975	53.9
1976	53.6
1977	49.7
1978	50.9
1979	56.4
1980	58.6

Nonfinancial corporate profits tax libalibities as percent of corporate profits with inventory valuation adjustment and depreciation of fixed assets adjusted to replacement costs at double-declining balance over 75 percent of Bulletin F service lives.

Senator GRASSLEY. Thank all of you very much. I'm going to direct questions, the same questions, to one or two of you, but I would also encourage any of the other one or two to join in if they have anything to add. I would like to ask Dr. Rahn and Dr. Roberts if you see a value-added tax as a disincentive to productivity.

Dr. RAHN. Relative to what, Mr. Chairman?

Senator GRASSLEY. Relative to what we have right now.

Dr. RAHN. As a substitution for the current income tax?

Senator GRASSLEY. I would see it that way, but I would ask you to comment as a substitute and as an add-on.

Dr. RAHN. I think a properly structured value-added tax as a substitute for the current income tax would be less of a disincentive to productivity performance. I want to stress, however, that it would have to be properly structured and would have to be a substitute. The addition of a value-added tax on our existing tax structure would be disastrous for productivity performance and for economic growth.

Senator GRASSLEY. Dr. Roberts.

Dr. ROBERTS. I would think a value-added tax would be on the whole inferior to a broad based, flat-rate tax that excluded savings from the tax base. I think it would also be a tax that would be too easy to raise, the value-added tax, because a very small increase raises tremendous revenues. It's not always easy to muster opposition to higher taxes when they take the form of a value-added tax, as compared to departing from a low flat-rate income tax.

Senator GRASSLEY. I think this one should be directed to all three of you. This is the question I asked the administration. In regard to depreciation, should it be geared to technological obsolescence, rather than time periods, and will this have the effect of increasing productivity?

Mr. GENETSKI. You asked me the question before about the nature of Government spending.

Senator GRASSLEY. Yes.

Mr. GENETSKI. I feel a lot about capital formation and tax benefits for capital as I do in terms of Government expenditures. That is, it is a very complex issue. We go back through history and we can find the capital stock in the United States in 1950 was the same as it was in 1929, according to the official records. Yet productivity grew 2 percent a year in that interval. We also find in the Soviet Union, figures suggest that approximately 30 percent of their income is plowed into new capital formation. The results on their productivity is just terrible.

It's not simply a question of trying to make the latest technological investment most attractive or to make this capital good or that capital good more attractive. It's a question of trying to generate productivity by getting the maximum amount of incentives out of the free market system. From that perspective, I believe that it's desirable to have the most neutral tax through all of the economy as opposed to trying to artificially stimulate or benefit one particular area.

Also, when you try to do that, I think just naturally political forces get involved. The area that you end up stimulating, ends up being the area that has the most political clout as opposed to the

area that might necessarily be chosen by the freemarket as being the most beneficial for productivity.

Dr. RAHN. I largely concur with those comments. I don't know how we could construct a depreciation system based upon technological obsolescence, largely because we don't know technological obsolescence beforehand. In other words, we know it ex post, not ex ante. I would like to see a depreciation system with much greater flexibility for letting the market determine the appropriate rate of depreciation over time.

Dr. ROBERTS. I would like to pick up on those remarks, Mr. Chairman. As you know, over most of our history we did not have an income tax either on individuals or corporations. In fact, during the most successful periods of our history, we had no income tax. It was a period in which it was up to the markets to judge the success of decisionmakers in the decisions they made about how they were writing down their capital investments.

Once you have an income tax, then somebody has to start telling the corporations how they can depreciate their assets. Of course, those people don't know. But they start telling them. You have a depreciation basis, historical basis, which make no sense in a period of inflat on. It may not have made any sense anytime, but certainly made no sense in the period of inflation we have gone through.

So there we have the nature of our problem, and so I think that if you are going to be taxing corporations and you are going to be thereby interfering in their decisions on how they write down their investments, then perhaps expensing is the simpliest and most straightforward rule for this problem.

Senator GRASSLEY. All right. Dr. Roberts, I would like to ask you another question I asked one of the previous panelists. It regards the impact of the transition period on productivity more from what we have today to a more simplified form of taxation which you see as the flat-rate tax especially exempting savings from the tax base. Is getting from here to there got any impact on productivity as far as you are concerned? Anything other than the mechanical problems you have in getting from here to there? Do you see any?

Dr. ROBERTS. I think Senator McLure gave a good answer to that. The gains you would expect from a more sensible tax system would far outweigh whatever transitional problems that you had. Those transitional problems would more likely be political problems than economic problems.

Senator GRASSLEY. All right.

Mr. Genetski, if out here in the future you had a transition from one to the other, would you predict any changes in these bars during that time period?

Mr. GENETSKI. Yes.

Senator GRASSLEY. I'm talking now just about the transition as opposed to the end result you seek.

Mr. GENETSKI. Well, one of the things that was remarkable to me was apparently how quickly productivity did respond to the tax changes in the study. We had a lot of discussion about this with a lot of people arguing that it probably would take a much longer period of time than just a year or so for a tax change to have some sort of visible impact on structural productivity.

And the question, again, gets to exactly how the tax change brings about the change in productivity. One way that I believe is extremely important and yet often forgotten deals with savings. I don't believe it's necessarily the quantity of new savings that is generated from a change in marginal tax rates, but perhaps the quality of that saving or at least how an existing amount of saving is used

In other words, if we have only an existing amount of limited savings in the economy, but because of high tax rates we are hiring a lot of lawyers and accountants to tell us where we ought to put that limited amount of savings so that it does us the most good on an after tax-basis instead of where it might do the economy the most good, we may have an adverse impact on productivity.

As soon as you get those marginal tax rates down, there is less destruction to the economy's efficient allocation of our scarce savings. That can occur very quickly, as a matter of fact, especially if everyone knows the tax rate is going to change a year from now. There may be less of an incentive to hire as many tax accountants and lawyers as might otherwise be hired.

So, I believe that the effect is going to be very quick, and, as a result, since we would all like more as opposed to less in terms of productivity, the only thing that I would argue about the transition is that from an economic perspective it occur as quickly as possible.

Senator GRASSLEY. I believe that those are the most important questions that I wanted to touch on. I did have two or three more, but we went over them with previous witnesses.

I want to thank each of you very much, and encourage particularly those of you who are in town here and can have dialog with my staff on this in the future to please do that because we want to seek some legislative solutions as a result of these hearings. And we need the continuing dialog to do that.

Thank you.

Dr. ROBERTS. Mr. Chairman, I encourage you to push forward with this.

Senator GRASSLEY. All right. Thank you very much.

Now our last panel I call to the table is: Dr. Norman Ture, president, Institute for Research on the Economics of Taxation, Washington, DC; Barry Bosworth, senior fellow, Economic Studies Program, the Brookings Institution, Washington, DC; Jerry J. Jasinowski, executive vice president and chief economist of the NAM; and Dr. Herbert E. Striner, professor of business economics, American University, Washington, DC.

I would ask that you proceed in the order in which I introduced you.

Dr. Ture.

STATEMENT OF DR. NORMAN B. TURE, PRESIDENT, INSTITUTE FOR RESEARCH ON THE ECONOMICS OF TAXATION, WASHINGTON, DC

Dr. TURE. Thank you, Mr. Chairman.

I think the subcommittee is to be commended for undertaking these farsighted hearings concerning the effects of our tax system on productivity. The rate at which productivity advances is a key

determinant in a meaningful measure of the Nation's economic progress. And in order to facilitate that progress, public policy should seek to identify the impediments to productivity advance and to reduce it; not eliminate them.

The major institutional obstacle to advancing productivity is our tax system. By masking and distorting market determining prices, our taxes give off wrong signals about the most effective way to use the resources at our disposal. The consequences of responding to these tax distorted relative process—we allocate our productive capability and our incomes to other than the most productive uses.

One of the most adverse price distortions imposed by the tax system is the miscue it gives us about the relative cost of current consumption and future income. As a result, we use more of our current income for consumption and less for buying the capital—human and nonhuman—which augments our future incomes than we would if our taxes did not raise the cost of saving relative to the cost of consumption.

A tax system less obstructive of productivity growth must be geared more closely than in the past to the neutrality criterion of taxation. That is, minimum distortion of the relative prices and costs that would prevail in a taxless world. We will never devise a tax that is entirely free of these excise effects, but we should certainly seek to keep those effects to a minimum.

Eliminating the prevailing tax bias against savings should be of particular concern in a policy which seeks to free up the forces for advancing productivity. A univeral law of economics is that the productivity of any production input is greater, the greater the amount, and the better the quality of the other production inputs with which it is combined in the production processes.

Advancing labor's productivity, its real wage rates, and its employment is critically dependent, therefore, on increasing the amount and the quality of the capital with which labor is employed. Increasing and improving the stock of capital depends on saving. So long as the cost of saving—which is properly defined as the amount of current consumption which must be foregone to have a given amount of after tax income in the future—so long as that cost is artificially escalated by our tax system, that long will we be putting roadblocks in the path of advancing productivity and economic progress.

The tax bias against saving is inherent in an income tax. It is accentuated by marginal rate graduation and by the additional layers of tax imposed on the rewards for saving by the corporate income tax, by capital gains taxes, by estate and gift taxes, by property taxes levied by the States and localities.

Well, we ought to do something by way of changing our structure in order to eliminate these obstacles to saving, to capital formation, to advancing productivity. Let me suggest briefly what we should not do.

What we should not do is what we have been busy doing ever since we enacted ERTA in the summer of 1981. In the name of closing loopholes or correcting abuses or eliminating inequities or simplification or what have you, Congress has passed tax legislation in 1982, tied abortively last year, and again this year, that singled out particular types of transactions, particular taxpayer situations,

particular forms of investment, particular this and particular that to expose to effectively higher marginal tax rates.

Of the more than $225 billion additional revenue over 5 years which TEFRA presumably would provide, as well as roughly $100 billion of additional revenue over 5 years under the Finance Committee bill before you now, a very substantial part of the additional revenues is slated to come from returns on saving. It is difficult to conceive the circumstances in which these additional taxes on the rewards for saving will not increase the cost of saving and slow the expansion of the capital stock and productivity compared to the rates of advance which would otherwise be realized.

Of course, the standard reply to that kind of argument is that these additional taxes will reduce the Federal deficit, and release private saving from deficit financing and allow more of it to be allocated to capital formation.

I surely do not want to impose on the time now with a detailed refutation of that mischievous notion. Let me instead summarize the findings and conclusions which I and others at IRET and in other organizations have come up with. To wit, neither good theory nor appropriate analysis of experience of firms that deficits per se crowd out. Both good theory and appropriate analysis urge that raising taxes to reduce deficits in the interest of alleviating alleged crowding out is ineffectual at best; and is, in fact, counterproductive.

I shall be happy to provide for the record various IRET materials bearing on this matter.

Well, having disposed of what we shouldn't do, leaves questions about what we ought to do. I believe a basic restructuring of our Federal tax system, replacing our income, estate and gift, and excise taxes with a broad based uniformly applicable consumption tax should be given top priority consideration. This restructuring would be a major step toward providing the tax environment in which our market system would efficiently direct productive resources and income claims to their most productive uses.

There are, of course, several types of consumption-based taxes, differing with respect to a large number of attributes, such as the point of collection, methods of assessment, compliance and enforcement problems, and so forth.

A soon-to-be-published IRET fiscal issue explores the principal features of a so-called consumed income tax, a retail sales tax, a manufacturer's excise tax, and a value added tax, and explains their respective merits and disadvantages.

One of the major findings of this study is that all consumption based taxes share a basic advantage over the standard income tax. That is, they are neutral with respect to the saving consumption choice. Consumption taxes increase the cost of saving no more and no less than they increase the cost of consumption. And, therefore, they do not alter the relative cost of those uses of our resources and our income.

In the context of this subcommittee's concern in this area, I think this is a critically important feature of those taxes. Now to be sure, we would confront scores of transition problems in moving from the existing to the proposed new tax structure. Notwithstanding, the restructured tax would be simpler, it would be fairer and it

would far less distort the price signals on which we base our choices concerning the allocation of our incomes and sources.

With this restructuring we would go far toward removing the existing impediments to the advance of our productivity.

Again, I want to commend the subcommittee and you, Mr. Chairman, for holding these hearings. I would hope that the results will prove useful to the subcommittee and to the entire Finance Committee in energizing its efforts for and sharpening its focus on constructive revisions of our tax system.

I would like to have my full statement included in the record. Thank you.

[The prepared written statement of Dr. Ture follows:]

Taxation and Productivity

Statement by

Norman B. Ture, President*

Institute for Research on the Economics on Taxation (IRET)

Presented to the

Subcommittee on Oversight

of the

Committee on Finance, U.S. Senate

April 13, 1984

Chairman Grassley, it is a privilege to be given this opportunity to testify on a subject of continuing importance to public policy makers. You and the subcommittee are to be commended for undertaking these hearings and for giving renewed currency to a topic which generally occupies attention only when economic performance is substandard. During this period of rapid economic improvement, we tend to become a bit euphoric about the economy and to slight concerns of long standing. It is, I believe, wholesome to remind ourselves that for the long-run economic progress of the nation, a major focus of public policy should be on reducing institutional impediments to advancing productivity. One such impediment is our tax system. More than most of our other institutional arrangements, it distorts market signals about the costs of and rewards for alternative uses of our production capability and results in far less than optimum allocation of resources.

* The views expressed in this testimony are my own and are not to be construed as necessarily those of IRET or any other organization with which I am associated.

Taxation is not the only instrument of policy which impairs the functioning of our market system, but it is very likely the most pervasive and powerful public policy influence. Constructive revision of our tax system should be given the highest possible priority in public policy making. President Reagan's directive to the Treasury Department to produce a set of alternative plans for such basic restructuring of the Federal tax code is to be applauded. So, too, is today's inquiry.

If we are to achieve a tax system that is less of an impediment to economic efficiency and progress than our present system, we shall have to advance the neutrality criterion as a policy guide to a position of far greater prominence than it has enjoyed for most of our fiscal history. For the most part, tax policy has primarily chased after a conceptually elusive goal---equity---at the expense of neutrality---minimum change in the relative prices which would prevail in the absence of the tax system. As a consequence, our present tax system is a hodgepodge of selective excises. The principal economic attribute of an excise is that it raises the price of the things that are taxed relative to all other things. In this sense, the major taxes in our present system are indeed a collection of excises. Our individual income tax imposes excises on working and saving, raising their costs compared with nonmarket directed uses of our time and productive capabilities and current consumption, respectively. This excise effect against saving is compounded by the corporation income tax, the taxation of capital gains, and

estate and gift taxes. The anti-work excise is enhanced by our payroll taxes and by a wide assortment of well-intentioned transfer programs that increase the relative cost of working and of being employed.

To be sure, all taxes have some excise effect and therefore violate the neutrality criterion. As a practical matter, therefore, we can't realistically aspire to perfect tax neutrality---to a tax system which does not change any relative prices or costs compared to what they would be in a taxless world. We can, however, be guided to a far greater extent than we have been by the benefits to be derived from minimizing these relative price-distorting---these excise---effects of taxation.

For purposes of today's hearing, I want to confine my discussion to one of the principal adverse thrusts of our tax system---its severe bias against saving---and relate that adverse impact to the pace at which productivity expands. Before turning to that discussion, let me take the liberty of immodestly calling to the Subcommittee's attention The Effects of Tax Policy on Capital Formation, a book which I co-authored with B. Kenneth Sanden. Published by the Financial Executive Research Foundation in 1977, the book attempts to estimate the amount of private sector saving which will be needed over the then ensuing decade if additions to the stocks of private capital adequate to maintain the historical rate of advance of labor's productivity and real wage rates advance are to be realized, along with the

saving and capital demands imposed by public policies. The book features an extended discussion of the anti-saving bias of the then existing tax structure and, as such, may serve the Subcommittee as a useful reference.

Saving as the Key to Productivity Advance

The concern with the effect of tax policy on private saving should stem from one of the most fundamental cornerstones of economics, that there are certain universal laws of production, one of which is the law of variable propositions, more popularly known as the law of diminishing returns. This law holds that the marginal productivity of any given production input---the changes in total output which would result if the amount of that input were to change by a unit---depends on the amount of other production inputs with which it is combined in production processes. In terms that all of us are familiar with, the more and the better the capital which any worker uses in his job, the more productive the worker will be. In other words, increase the ratio of capital to labor and you increase labor's productivity. Because the marginal value productivity of differing amounts of a given kind of labor delineates the demand for that labor, increase the quantity and the quality of the capital with which that labor works and you increase the demand for that labor's services. And increase the demand for labor's services and you increase both employment and the real wage rate at which labor is employed.

Capital, as we all know, comes in a myriad of forms. Our knowledge as applied in production is human capital. We develop that knowledge by education, training, research, development, and experience. An extremely important part of our capital, of course, consists of physical facilities---machinery, equipment, and the structures in which they are housed. Without belaboring the point, capital is a highly varied production input; no matter its form, however, the accumulation of all capital entails a common requirement---saving. Indeed, one very useful definition of saving is the act of acquiring sources of future income. A moment's reflection leads to the conclusion that saving so defined is the same phenomenon as capital formation, irrespective of the form the capital formation may take.

To recapitulate to this point, advancing productivity requires increasing the capital: labor ratio. Increasing the capital: labor ratio entails saving. If we are concerned about tax policy and productivity, we must focus that concern on the adverse effects of the tax structure on saving behavior and on what we should do to moderate if not eliminate those effects.

Determinants of Private Saving

Gross private saving---that part of the nation's gross national product which is not consumed or used to pay taxes---consists of the saving of households---personal saving---and of

businesses. The latter consists of undistributed corporate profits and capital consumption allowances of corporations and unincorporated businesses.

Obviously, the amount of private saving and consumption is constrained by the economy's aggregate income the total claims generated by the output of the economy---and the amount of that income left in private hands after taxes are taken out and government transfer payments of all sorts are added in. That amount, in other words, sets an outside limit on the amount that can be saved and used to buy sources of future income, on the one hand, and the amount that can be currently consumed, on the other. What determines the division of our available income between consumption and saving?

There are, to be sure, any number of cultural influences on our saving behavior, but these tend to exert long-lasting and persistent pressures, substantially removed from public policy in the near term. They have, therefore, little value in explaining the changes in saving behavior, particularly in relatively short periods of time, e.g., 5-year intervals or decades. As the following table shows, the fraction of our GNP, which households and businesses have saved has not been constant since World War II. The variations in the saving rate do not reflect, primarily, cultural changes so much as changes in economic factors.

Table 1

Private Saving in Relation to GNP

(Five-Year Periods)

Period	Average Ratio to GNP of		
	Gross Private Saving	Personal Saving	Business Saving
1948-1950	14.9	4.2	10.7
1951-1955	15.7	4.7	11.0
1956-1960	16.4	4.7	11.7
1961-1965	16.3	4.4	12.0
1966-1970	16.3	5.0	11.3
1971-1975	17.0	5.7	11.3
1976-1980	16.9	4.2	12.7
1981	17.3	4.6	12.7
1982	17.0	4.1	12.9
1983	17.2	3.5	13.8

Source: Council of Economic Advisors Economic Report of the President, 1984, Tables B-1 and B-25, pp. 220 and 250, respectively.

The Cost of Saving

Given available income and cultural influences, saving behavior is significantly determined by the cost of saving relative to the cost of current consumption. The cost of

saving---of buying a future income stream---is the amount of current consumption one must forego to have a dollar of after-tax future income. By the same token, the cost of current consumption is the amount of future income which must be sacrificed. The higher the cost (so defined) of saving, the less will be the amount saved out of any given amount of available income.

The capital: labor ratio and the cost of saving

Two sets of conditions principally determine the cost of saving. The fundamental economic determinant is the marginal productivity of capital which, in an efficiently functioning market system, sets the pretax reward for a marginal unit of capital. Going back to our law of variable proportions, the greater the amount of capital in relation to labor inputs, the lower will be the marginal productivity of capital, hence the lower will be the pre-tax reward for making an additional unit of capital available for production. Of all of the nations in the world, the United State has virtually the largest stock of capital in relation to labor. The pre-tax reward for saving---for adding capital---thus is lower here than in most other nations. By the same token, the cost of saving in the U.S. is higher than elsewhere.

Paradoxically, part of our problem in generating adequate saving derives from our past success. We have in the past become

perhaps the most heavily capital endowed country in the world. The consequence of having done so is that our cost of saving and capital is also extraordinarily high.

The tax structure and the cost of saving

The second set of influences on the cost of saving is the tax system. The greater the fraction of the pre-tax return for saving which is taxed away, the less is the amount of after-tax future income which can be obtained from a dollar of foregone current consumption, hence the higher is the cost of the future income. Our tax system depends heavily on taxes which impose differentially heavy burdens on saving, raising its costs relative to current consumption uses of our production capability and incomes. These saving-penalizing Federal taxes are the individual and corporate income taxes, and the estate and gift taxes. Such taxes, along with property taxes also are important elements, although to a somewhat lesser extent, in state and local government revenue systems. As the following table shows, Federal income, estate and gift taxes have accounted for between 55 and 62 percent of total Federal tax revenues (measured on a national income accounts basis) each year since 1975. At the state and local government levels, these levies have produced roughly a third of total government receipts each year in the same period. For all levels of government, these taxes have been close to one-half of all budget receipts every year since the mid-seventies.

Table 2

Income, Estate and Gift, and Property Taxes

as Percent of Total Budget Receipts

1976-1983

Year	Federal Income and Estate and Gift Taxes as % of Total Federal Budget Receipts	State and Local Income, Inheritance, and Property Taxes as % of Total State and Local Budget Receipts	Total Income, Estate, Gift, Inheritance, and Property Taxes as % of All Government Budget Receipts
1976	60.8	35.2	49.4
1977	61.8	35.3	50.1
1978	61.7	33.8	49.7
1979	61.8	33.0	49.8
1980	60.6	32.5	48.9
1981	58.4	33.1	48.3
1982	56.9	34.1	47.4
1983	55.3	35.2	46.7

Source: Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, July 1982, 1983, January 1984, Tables 3.3.

I have on numerous occasions sought to explain and illustrate the way in which such taxes differentially burden saving and capital formation. An extended discussion of the basic features of the income tax system which imposes this excise effect on saving may be found in the Ture-Sanden book cited above. A more recent discussion is my "Supply Side Analysis and

Public Policy" in Essays in Supply Side Essays, David Raboy, Ed., IRET, Washington, D.C. (1982), pp. 18 ff., which I have taken the liberty of reproducing at this point in my statement.

"The present tax system raises the cost of saving relative to the cost of current consumption. Just as effort and leisure exhaust one's available time, saving and consumption exhaust one's available income. The cost of saving a part of one's income, then, is the amount of current consumption that one must forego. Similarly, the cost of using part of one's income for current consumption is the amount of saving given up since saving is the purchase of a future income stream, the cost of any given amount of consumption is the future income which one must forego. An income tax of the sort levied in the United States raises the cost of saving relative to consumption, and this inherent income tax bias is accentuated by graduation and by the piling on of multiple layers of tax on the same income stream representing the returns on saving.

For example, suppose that with no tax one might use a marginal $1,000 of income to buy $1,000 worth of consumption goods and services now or buy an asset, say a bond, which at an interest rate of 10 percent, will produce $100 a year forever. Clearly, the cost of the $1,000 of additional current consumption is the foregone $100 per year; by the same token, the cost of an additional $100 of income every year is $1,000 of foregone current consumption.

With an income tax, the terms of this trade-off between current consumption and future income are altered. Again, suppose one's marginal tax rate is 25 percent. Then one's marginal $1,000 of income is reduced by the tax to $750, with which one can buy $750 of consumption goods and services now or a future income stream of $75.00 per year, assuming the interest rate remains at 10 percent. But the $75.00 of future income will also be subject to income tax, let us assume at the same marginal rate of 25 percent. Then the net-of-tax future income is $56.25. Before the tax was imposed, one had to give up $1,000 of current consumption to obtain $100 per year of additional income; the marginal cost per dollar of future income was $10. With the tax, one must forego $750 of current consumption to obtain $56.25 per year; the marginal cost with the tax is $13.33 per dollar of future income. The 25 percent income tax increases the cost of future income relative to current consumption by 33 1/3 percent.[6]

With graduation of income tax rates, the tax increases the cost of future income relative to consumption more than in proportion to the amount and/or productivity of saving. Since the marginal tax rate depends in large part on the amount of one's income, and since the amount of one's current income is likely to reflect in some part the amount one has saved in the past, the excise effect of the tax on saving is likely to be greater the greater the amount one saves. Similarly, the greater

the return per dollar of saving--the more productive one's savings--the higher is likely to be the marginal tax rate and, therefore, the greater the cost of additional saving relative to additional consumption.

To an even greater extent than in the case of the effort-leisure trade-off, the existing tax system is biased against saving and in favor of consumption. The basic bias, as shown, derives from the fact that the individual income tax is levied both on the amount saved and on the future income generated by the saving. But severe as this tax penalty itself may be, it is only the base of a pyramid of taxes resting on the same income stream. In the federal tax system, the corporation income tax constitutes another major tier of taxes on the returns to individuals' saving. The amount an individual saves is taxed as part of his current income, as shown above. If the saving takes the form of purchase of corporate stocks, the returns on the saving will be taxed initially under the corporate income tax. Insofar as the corporation pays dividends to the individual saver-shareholder, the individual pays tax again, further reducing the return to him per dollar of saving.

Another layer of tax on the returns to saving is provided by the tax on capital gains. A capital gain is the market's capitalization of an increase in the expected future income attributable to an asset. In an efficient market, corporate retained earnings will be reflected in increases in the market

value of the company's shares. This capital gain, obviously, is the capitalized value of the expected increase in earnings per share generated by the investment of the retained earnings. Imposing a tax on the gains realized if the shares are sold or exchanged is to lay an additional "one-shot" tax on the same stream of future income which the shareholder bought with the initial investment.

The source of the capital gains is the amount of earnings retained after the corporate tax was paid. At the time the gain is realized, it is the capitalized value of the expected increase in future earnings, which will in turn be taxed as they accrue. The tax on capital gains, thus, is an additional levy on an income stream subject to several layers of tax in any event.

The same returns on saving are also subject to the income taxes imposed by all but a few of the states. And insofar as the saving takes the form of real property, the same income stream is likely to be subject to state and local government property taxes, which though levied on the assessed value of the assets may be usefully perceived as imposts on the explicit or imputed income they generate.

Federal and state taxes on property transfers by gift or at death are akin to capital gains taxes with respect to their effects on the cost of future income compared with present consumption. The base of such taxes is the market value of the

transferred property, which in turn equals the present value of the future income the property is expected to produce. That future income will, in the ordinary course of events, be taxed as it materilizes over time. Taxing its capitalized amount on the occasion of the property transfer is an additional levy on the same income stream.

Moreover, the property may also be perceived as the accumulated amount of past income which had been reserved from consumption. Again, in the ordinary course of events, that past income had been taxed as it was received. Taxes on the value of the property on the occasion of its transfer are a further layer of tax on the same income stream.[7]

The tax laws, particularly the income taxes, contain numerous provisions which somewhat ameliorate the effects of the multiple layers of tax on the rewards for saving. For example, if saving takes the form of depreciable property used in a trade or business, depreciation deductions and the investment tax credit mitigate the additional income tax burden entailed in taxing both the amount saved and the subsequent income generated by the saving. But unless the present value of the depreciation deduction and investment credit equals the present value of the costs incurred to acquire the depreciable property--i.e., the amount saved at least some of the additional cost of saving imposed by the income tax remains. To eliminate completely the extra tax on saving, the amount saved (equivalently, capital

outlays) would have to be expensed--that is, deducted in full in the year in which the saving occurs--while the gross returns on the saving are included in taxable income as they are realized.

Apart from capital recovery deductions, a wide array of special provisions are generally noted as reducing the aggregate burden of the income taxes. These so-called "tax expenditures" are often characterized as subsidies, but are more appropriately to be seen as mitigations of the effects of the income tax in increasing the cost of saving and of effort relative to the cost of consumption and of leisure, respectively. Whatever case may be made for eliminating or reducing these "tax expenditures," doing so would raise the relative cost of effort and saving."

Let me add another word about estate and gift taxes which, I believe, receive too little attention for their adverse effect on economic growth. These taxes not only add to the extra cost of saving compared with consumption, as described above, they also often impel inefficient dispositions of accumulated capital and business assets to minimize the erosion of such accumulations by the tax, increasingly exotic devices are developed and used to shelter the property transfers. For the most part, these devices are not designed with an eye to maximizing the income-producing attributes of the transferred assets as much as minimizing the tax bite on the transfer. The productivity of the capital and of the labor services with which it is used in these tax-inspired arrangements suffers. And so, too, does the entire economy.

Reducing the Tax Bias Against Saving

This discussion has sought to explain how important elements in our tax system bias our choices against saving and in favor of current consumption. This anti-saving bias erects a significant barrier to capital formation and, therefore, to productivity advance by raising the relative cost of saving and capital formation. On the brave assumption that this discussion is persuasive, the obvious question is "what should we do about it?"

What we should not do is what we have been busy doing ever since we enacted ERTA in the summer of 1981. In the name of "closing loopholes," "correcting abuses," "eliminating inequities," "simplification," what have you, tax legislation in 1982 and again this year has singled out particular types of transactions, particular taxpayer situations, particular forms of investment to expose to effectively higher marginal tax rates. Of the more than $225 billion additional revenue over five years under TEFRA and roughly $100 billion additional revenues over five years under the House bill or the Finance Committee bill, a very substantial part of the additional revenues is slated to come from returns on saving. It is difficult to conceive the circumstances in which these additional taxes on the rewards for saving will not increase its cost and slow the expansion of the capital stock and productivity compared to the rates of advance which would otherwise be realized.

The standard reply is that these additional taxes will reduce the Federal deficit and release private saving from deficit financing to financing capital formation. I don't want to impose on the Subcommittee at this time with a detailed refutation of that mischievous notion. Let me, instead, summarize the finding and conclusions which I and others at IRET have come up with, viz., neither good theory nor appropriate analysis of experiences affirm that deficits per se crowd out; both good theory and appropriate analysis urge that raising taxes to reduce deficits in the interests of alleviating alleged crowding out is ineffectual at best and, in fact, counterproductive. I shall be happy to provide for the record various IRET materials bearing on this matter.

Having disposed of what we shouldn't do leaves the question about positive steps to take.

The basic recommendation I would offer is to restructure a substantial part of the existing Federal tax system from an income to a consumption base and to do so as expeditiously as possible. There are, of course, several types of consumption-based taxes, differing with respect to such attributes as point of collection, methods of assessment, compliance and enforcement problems, etc. A soon to be published IRET Fiscal Issue explores the principle features of a so-called consumed income tax, a retail sales tax, a manufacturers' excise tax, and a value added

tax and explains their respective merits and disadvantages. One of the major findings of the IRET study is that all consumption-based taxes share a basic advantage over the standard income tax, i.e., they are neutral with respect to the saving-consumption choice. Consumption based taxes do not exempt saving and capital from taxation, but in contrast with the present income tax, avoid the multiple taxation of saving and the rewards thereto. Consumption taxes, in short, increase the cost of saving in the same proportion as the cost of consumption, hence do not alter their relative costs. In the context of this Subcommittee's concern in this hearing, this is a critically important feature of such taxes.

If we were to restructure our tax system as I've proposed, we should eliminate existing excises (including the windfall profit tax), income taxes, and estate and gift taxes. We would want to have the broadest possible base for the new tax with the fewest possible exceptions. By the same token, we would want to have the flattest possible marginal rate structure, affording whatever progressivity in the distribution of tax liabilities that is deemed to be essential by providing per capita exemptions and/or a zero rate bracket.

To be sure, we would confront scores of transition problems in moving from the existing to the proposed new tax structure. Notwithstanding, the restructured tax would be simpler, fairer, and would far less distort the price signals on which we base our

choices concerning the allocation of our incomes and resources. With this restructuring, we would go far toward removing the existing tax impediments to the advance of our productivity.

Again, I believe the Subcommittee is to be commended for holding these hearings. I hope that the results will prove useful to the entire Finance Committee in energizing its efforts for and sharpening its focus on constructive revisions of our tax system.

Senator GRASSLEY. Mr. Bosworth.

STATEMENT OF MR. BARRY BOSWORTH, SENIOR FELLOW, ECONOMIC STUDIES PROGRAM, THE BROOKINGS INSTITUTION, WASHINGTON, DC

Mr. BOSWORTH. Thank you, Mr. Chairman.

I would like to limit my remarks just to a few aspects to the linkages between tax policy and productivity growth. In particular I would like to discuss the issue of saving, incentives, investments and the effects of taxes on labor supply.

First of all, I think a major point to make on the saving side is that although the evidence is abundant that tax policy has an enormous impact on the allocation of saving—the form in which our savings takes place—the evidence that the tax policy can end up with a net stimulus to the private saving rate is extremely controversial. An example of that controversy is provided by the recent experience of the 1981 Tax Act which its major objective was to increase national saving in the United States.

In fact, the outcome of that experiment to date has been absolutely nothing has happened to the private saving rate in the United States. In fact, net private saving rates in the United States have declined a little bit. And because of the enormous increase in the Government dissaving occasioned by a tax reduction not accompanied by any reduction in Government expenditures, the result has been that this Nation now finds itself with a national saving rate, as pointed out in the back of the testimony in the table, down to one-third of what it was before that program was enacted.

We now are a Nation critically short of saving to support capital formation in the United States, and we are running up an enormous foreign debt attempting to try to borrow overseas resources sufficient to try to maintain capital formation at the United States' currently low level.

That is a very serious problem. If the Congress was serious about trying to increase the amount of resources available to private capital formation in the United States, there is a very easy way to do it. Have the Government reduce its own dissavings, which is to deal primarily with the budget deficit problem.

And I think far more would be gained by focusing on an effort to increase resources for capital formation if the Government dissaved less and worried less about futile attempts to try to encourage private saving in the aggregate.

In the second area of investment, most of the economic research of the last decade has been devoted to the issue of whether or not tax policy can stimulate the overall level of investment spending within the economy. I think the evidence on that basis is quite strong and indicates the tax policy is an effective means of encouraging private capital formation in the United States. But more recently a much more troubling and probably more dominating problem has emerged with the U.S. current tax system.

And that is, while the multitude of different tax preferences now in existence may promote more capital formation, they are seriously distorting the allocation of existing levels of capital formation. The conclusion is rapidly being reached that, in fact, the U.S. system of taxation of income from investment results in a reduc-

tion of productivity growth rather than an increase because so much capital is wasted in unproductive uses.

Third, in the area of labor, I think there has been far too little recognition of the fact that when we vote to exempt the income of some groups from taxation we inevitably vote to increase the taxation of the rest of us. And in the United States on both a marginal and on an average tax basis, the only type of income that has experienced an increase in taxation over the last 30 years is that of labor. And I think increasingly efforts to reduce taxation of the income from capital, which must be responded to by increased taxation of labor, raise very serious issues in this country about weakening incentives for people to work.

I would conclude from these examples and research work that has been done on the link between tax policy and productivity growth, that the United States today would, in fact, benefit from an elimination of the complete system of tax preferences that we now have. The Government would be better off to return to a primary focus on an old-fashioned idea, which is the primary idea behind a tax system—to raise revenue sufficient to finance expenditures.

And the basic attitude that should be adopted toward different types of economic activity is that the tax system should aim to be neutral and not trying to influence in any way the distribution of work effort and investment in the United States.

I have included at the back of this testimony a table, table 3, I believe, which is designed to illustrate the enormous distortion of effective tax rates on different types of investment now in place in the United States. We now find that for new investments being undertaken under current tax law, that effective tax rates on different types of investment range from a large negative value or absolute tax subsidy for some types of investment to prohibitively high rates of taxation in excess of 50 percent for other types of capital investment. That sort of distortion is very costly.

Let me conclude with two final notes. First, the whole view of productivity growth and the Government's role in that has been far too simplified with this focus on saving and capital formation. It is equally important to recognize that R&D spending has had a rate of return to the private individual nearly twice that of physical capital formation. And that the rate of return to society is estimated to be far higher than that.

It would be a great shame if in this effort to promote increased physical capital that we end up reducing R&D expenditures in the United States. We learn from the studies that efforts to promote R&D by indirect methods such as tax incentives are extremely ineffective. As one illustration of this, based admittedly on very preliminary data, the 1981 Tax Act tried to encourage R&D by setting up a category of expenditures classified as R&D and giving a tax credit. On the basis of outside information of surveys of firms' R&D expenditures, we find no acceleration to date of the rate of growth of private R&D spending.

On the other hand, if we look at the preliminary tax returns, there has been an explosion of R&D classified expenditures. The industry, just as an example, that shows up with one of the largest increases in R&D spending on tax returns is the advertising indus-

try. All that has happened under the new tax system is to grossly distort what people call R&D because it is admittedly a hard thing to define.

I think the evidence instead shows that the really high returns to R&D are in basic research. And that because most of the benefits of that are external to the individual who undertakes it, the real requirement is for the Government to get much more actively involved by direct expenditure programs to promote R&D in the basic research area. And that requires programs that must be incorporate peer review type processes to ensure that the research is being directed toward profitable activity.

Finally, the last area I would like to mention that I think is overlooked in the discussion of productivity growth is education or human capital. We are an economy that is evolving more and more away from an emphasis on physical capital, and more and more toward an emphasis on human capital.

Again, the empirical studies indicate that the return of human capital is equal to or in excess of the return to physical capital. Yet Government has long played a major role in trying to promote educational activities in the United States and investments in human capital.

It would, again, be a great shame if in an effort to try to encourage physical capital formation in the United States we erode the incentives and the resources available to education and human capital. It is not clear to me at all that productivity growth in the United States is enhanced by a Government program that ends up increasing subsidies to physical capital formation and reducing the amount of Government expenditures on human capital formation.

Thank you.

[The prepared written statement of Mr. Bosworth follows:]

Statement of Barry Bosworth*

Before the

COMMITTEE ON FINANCE

Subcommittee on Oversight

of the Internal Revenue Service

United States Senate

April 13, 1984

*Barry Bosorth is a Senior Fellow at the Brookings Institution. The views expressed in this statement do not necessarily reflect those of Brookings staff members or the officers and trustees of the Brookings Institution.

I appreciate the invitation of this subcommittee to testify on the effects of the tax policy on economic growth — a subject of my own research interests for the last several years. Several years ago a President described the U.S. tax system as a disgrace and in the intervening period it has gotten much worse. The primary purpose of the tax system — to raise revenues sufficient to finance government expenditures -- has been lost in a complex maze of contradictory and little-understood provisions to promote specific types of economic activity. Provisions aimed at encouraging one type of activity often have had the unforseen effect of discouraging others and the interaction of different provisions sometimes has led to a perverse effect relative to what was intended by the Congress. Each time the Congress acts to exclude the income of some favorite group from the tax base, it requires higher average and marginal tax rates on those who remain.

The tax system can have important effects on economic growth through its influence on saving, investment, and work effort. The empirical research, however, clearly shows that those effects are secondary to the importance of maintaining a sensible fiscal and monetary policy that promotes expectations of a sustained noninflationary expansion of the overall economy, together with the availability of financing at reasonable costs. When the complexity of the tax system begins to interfer with that primary objective, as it now does, something has gotten seriously out of kilter. Before turning

to some specific issues of tax policy, let me review briefly what we do know about the potential effects of tax policy in the areas of saving, investment, and work effort.

Saving

Contrary to much of the public discussion, rates of saving have not declined in the United States (see table 1). In fact, the private savings rate has been a slowly rising share of GNP throughout the post-war period. What has changed is the composition of that saving. In part, because of tax law changes, corporations retain a larger share of their earnings for reinvestment and the household savings rate shows a corresponding decline. The composition of private saving, however, has little significance for capital formation. It is true that the U.S. rate of private saving ranks low among industrial nations (see table 2).

More important, it is difficult to accept the view that domestic saving is a major constraining influence on domestic investment or that an increase in domestic saving would be fully reflected in an increased rate of capital formation. We live in a world of international capital markets, where increments to domestic saving can easily flow abroad if the return on foreign investment is above that of domestic uses, and domestic investors can draw from a pool of world-wide saving. The sharp rise of world saving rates, provided by the surplus of the OPEC countries after 1973, illustrates the mechanism: the funds flowed primarily through U.S. financial institutions to finance investment in

the developing countries. That is, the adequacy of domestic saving is not necessarily relevant to answering the question of why investment in the United States is so low relative to other countries.

In addition, the adequacy of saving to support a specific level of investment is relevant only to a fully employed economy, or an economy where total output is constrained by monetary policy — situations in which resources for increased investment must be provided by foregoing private or public consumption. In the presence of unemployment, however, an increase in investment can be financed by the utilization of idle resources. In past years the failure to maintain the economy at levels consistent with full utilization of existing resources has been the dominant source of lost income and saving and a weakening of investment incentives.

Finally, there are two available methods by which government can increase the resources available for private capital formation. First, it can attempt to increase incentives for private saving. While the empirical evidence remains controversial, most economists would hold to the view that the increases in the after-tax return can have, at best, only a weak effect on private saving. The sources of the controversy can be illustrated by considering one's own response to a reduction in the tax on capital income. On the one hand, some individuals would be tempted to reduce their current consumption to take advantage of the higher after-tax return on saving. Alternatively, the increased lifetime income that will be earned because of the higher return on

previously planned saving argues in favor of increasing current as well as future consumption. All of us know some individuals who would react by increasing their saving and some who would react by reducing their saving. These doubts about the effectiveness of saving incentives are reinforced by the experience of the last several years. Taxes on capital income were reduced sharply and interest rates have been at extremely high levels; yet, the private saving rate shows little or no deviation from its historical trend.

Government can, however, act directly to increase the funds available for private investment by reducing its own dissaving: that is, cutting its own deficit or aiming at a budget surplus. For example, the 1981 tax reduction, since it was not accompanied by any reductions in total government expenditures, would have required the private sector to save its entire tax cut simply to leave national saving unchanged. That did not happen and the net national savings rate has declined to less than half the pre-1981 level — government is now absorbing two-thirds of net private saving in the United States. Given the uncertainties surrounding private savings behavior, direct actions to shift the government budget towards a surplus are more certain means of increasing national savings. Thus, government should look first to control its own budget balance as the primary means of insuring an adequate rate of national saving to finance investment. Efforts to increase incentives for private saving through tax law changes have, in large measure, simply changed the composition without

adding to the total.

Investment

Most of the economic research and public debate of the 1970s has focused on a perceived increase in taxes on capital income as a source of weak investment incentives. In recent years, however, the research has shifted the focus of discussion in two important respects. First, new research indicates that marginal tax rates on capital income fell during the 1970s rather than increasing, as previously believed. The major reason for this shifting conclusion is an improved understanding of the interaction between inflation and the tax laws. Inflation raises individuals into higher tax brackets, but because so much of capital income has been completely exempt from taxation, the major effect in fact was to raise the tax on labor but not capital income. In adition, inflation raises nominal interest rates. Interest is a tax deduction at the business level and is subject to income taxation when received by individuals, but because the tax rate of those who take the deduction is higher than that of interest income recipients, the net effect of higher interest rates is to reduce the overall tax rate at which investments financed by borrowed funds are taxed.

Second, while previous research was directed toward the overall tax rate on investment income, current work has highlighted the ways in which the tax system distorts and wastes the allocation of existing levels of investment. We have come to realize that effective tax rates are highly variable by type of capital asset, owner, and method of

financing. As a result, some investments are undertaken that would not be justified on the basis of their social return and others with a potentially high public return are not. A recent study by Fullerton and Henderson found that marginal tax rates (combining corporate, personal, and property taxes) on investment income, averaged 26% in 1982, but that average hid a variation in rates that ranged from a negative 5 percent for business equipment to as high as 40% for residential land (see table 3). This disparity implies a potentially large distortion in the allocation of capital.

There is also a significant variation of effective tax rates on investment by different firms. New firms or, more generally, firms with tax losses, often lack sufficient tax liabilities against which to offset their depreciation allowances and tax credits. Firms can "carry back" current losses to recompute tax liabilities of the prior 3 years, or they can be carried over to future years. Since, such unused tax deductions do not earn interest, however, their present value declines with increases in the nominal interest rates. As a result, there would appear to be a differential tax treatment of investments by new and existing firms.

Finally, the discussion of how to encourage investment in the United States has placed too much emphasis on tax policy measures at the expense of an emphasis on fiscal and monetary policies to provide a favorable overall economic environment for investment. The 1981 Tax Act, for example, was designed to promote capital formation. Yet, the

subsequent economic reactions worsened investment incentives. The rise in market interest rates fully offset any reduction in the cost of investment that followed the business tax reductions, and the recession led to a fall in actual rates of investment. The fundamental problem with investment is that before-tax returns have been falling over time in the United States. One certainly cannot attribute that to increased taxation of capital.

Labor Supply

Although much emphasis on the need to reduce taxation of capital income to encourage savings, little attention has been paid to the effects of increased taxation of labor income. Proposals to reduce the taxation of capital income as a means of stimulating investment must be financed by a higher tax on wage income and it is possible that the gains of a arger capital stock are offset by the contraction of the available labor supply. This issue takes on particular importance when we note that it is the tax on labor income rather than capital income that is increased dramatically during the 1970s.

Existing empirical studies indicate that the net effect on labor supply of a proportionate change in tax rates is relatively small. That net effect, however, is the result of offsetting income and substitution effects and the magnitude of the pure substitution effect is substantially larger. The issue can be illustrated by the simple example of an individual who currently takes one afternoon a week off from work to play golf. If his tax is reduced he is affected in two

offsetting fashions. On the one hand, he has an incentive to give up his afternoon off and return to the office because he receives a higher after-tax wage rate. That substitution effect pushes him in the direction of more work because of the higher opportunity cost of the foregone income or leisure. On the other hand, the increase in his after-tax income at existing levels of work effort implies he can afford more leisure and he may choose to play golf for two afternoons. Thus the income effect of a tax reduction pushes in the direction of less work -- offsetting much of the substitution effect.

The issue of the response of labor to tax changes, however, takes on great importance in a consideration of changes in the structure of the tax system that alter the marginal tax rate (relevant to the substitution effect) without altering the average tax rate (relevant to the income effect). In that case there would be a more substantial influence on labor supply decisions as the substitution effect is not offset by any income changes. For example, current proposals that the United States adopt a consumption tax system really amount to a tax on labor income alone. These proposals are motivated by a desire to reduce the taxation of capital income, but the consequence is likely to be a significant increase in the tax rate applicable to labor.

Implications for Policy

The economic policies introduced by the Reagan administration in 1981 emphasized the expansion of aggregate supply through increased incentives to work, save, and invest. Much of the effort was directed

towards a reduction in overall tax rates as a means of achieving the lower marginal tax rates that are stressed in the analysis of economic incentives. That supply-side economic program has encountered severe difficulties, however. The Administration and the Congress did not reduce expenditures in line with the cut in taxes, so there is a large increase in the current and anticipated budget deficits. That fiscal stimulus and the large capital market borrowing it entailed, collided with a monetary policy intend on restricting the supply of credit and economic activity to reduce inflation. The result was a sharp rise in interest rates that overwhelmed the incentive effects of the business tax cut. High interest rates and a recession combined to reduce rather than increase capital formation. In addition, the rise in interest rates is widely blamed for raising the U.S. exchange rate, thereby weakening the competitive position of those industries involved in international markets.

Supply-side incentives were temporarily forgotten under the pressure of economic recession. But the decline of inflation and economic recovery will revive the issues on how to increase economic growth. The focus on that policy discussion has shifted from the incentive effects of the tax reductions to a concern for the crowding out of private investment firms by the large deficits that emanate from the 1981 program. The original issue, however, is important and it should not be ignored.

What have we learned from this previous research and experience. First, it is important to maintain a strong distinction between overall fiscal-monetary policy and tax policy. For purposes of promoting long-term growth, I believe the appropriate mix of fiscal-monetary policy should be exactly the opposite of the high deficits and high interest rates which emerged from the decisions of 1981. Given the evidence that private savings is rather immune to manipulation by government, government should expand the resources available for domestic investment directly by reducing its own budget deficits. Meanwhile, monetary policy should be directed toward reducing interest rates as an incentive to pass through that increase in national saving into domestic investment.

In addition, the discussion of the incentives effects of tax policy should be redirected away from general tax reductions (primarily an issue of fiscal-monetary policy) towards proposals to reform the structure of the tax system to achieve greater efficiency in the employment of capital and labor. This perspective takes, as given, the government's need in the absence of cyclical fluctuations to raise enough revenues to finance its expenditures. A given amount of revenue can be raised by a variety of tax systems, however, and it would be desirable to choose one that has the least distorting effect on private decisions.

To date, the discussion of tax reform proposals has emphasized the potential effect on private saving behavior of eliminating or sharply reducing the taxation of capital income. I believe the quantitative importance of the effect of taxes on saving behavior is exaggerated, but when the system is evaluated from the perspective of investment, a second issue emerges — the distortion in the efficient use of capital occassioned by the wide variation in the tax on income from different assets. Furthermore, the evaluation of those reform proposals needs to take greater account of the labor supply implications of shifts in the distribution of taxation between capital and labor income.

A fundamental problem with the current income tax is that it lacks a conceptual framework or philosophy that would provide a basis, either in terms of fairness or efficiency, for choosing between the competing claims of different interest groups. Currently, it is a hybrid reflecting features of both an income and a consumption tax. In my view, government should give up the effort to favor one type of activity over another, and adopt instead a principle of uniform (or neutral) treatment of alternative forms of saving, investment, and work. This can be achieved either through an income or consumption-based tax system.

The major issues involved in the choice revolve around how to adjust capital income for the effects of inflation in the case of an income tax and the treatment of bequests under the consumption tax. The consumption tax can potentially avoid a large number of

asset-valuation problems because it would use cash-flow accounting; but if bequests are not included in taxable consumption, it becomes simply a tax on wage income alone. One proposal (a comprehensive income tax) responds to the distortion induced by the preferential tax treatment of different types of capital income by eliminating the preferences. The simplest version of the consumption tax goes in the opposite direction and extends the preferences to all types of capital income. It is clear, however, that the United States cannot continue with the current system and expect to achieve an efficient distribution of its capital resources. Thus a choice must be made.

Finally, let me close with the argument that capital formation and tax incentives to promote physical investment have played too prominent a role in the discussion of what to do to promote a higher rate of productivity growth in the United States. Changes in the rate of capital formation can not account for the slower growth of productivity since 1973. It is a decline in the efficiency with which both capital and labor are used (see table 4). The discussion ignores the complexity of the growth process and the importance of government policies to achieve a sustained noninflation growth in aggregate demand (fiscal-monetary policy) and the influence of government in areas such as research and development and education (human capital).

I believe that previous research has clearly demonstrated that the private return to R and D is above that of physical capital; and that the social return is much higher because of difficulties of preventing

others from stealing one's ideas. This argues for a substantial government involvement and that case is strongest for basic research where the externalities are likely to be largest. At the same time, tax incentives are a very ineffective tool to achieve that objective. Before 1981, expenditures on R & D were fully deductible from taxable income. The 1981 amendments provided subsidies for activities classified as R & D. Preliminary evidence shows no acceleration of private R & D efforts after the tax change, yet there is a large reported increase in claims on tax forms. The advertising industry reports one of the largest expansions of R & D for tax purposes. This demonstrates to me the difficulty of using indirect methods, such as tax credits, as a means of stimulating R & D efforts. To be effective the government must become more actively involved through expenditure programs to encourage specific types of R & D efforts — possibly through expanded use of peer-review based programs such as those of the National Science Foundation.

The United States has also benefited enormously from having a highly trained workforce. Again the studies find that educational investments have a return equal to or greater than that on physical capital. This has traditionally been an area of extensive government expenditures. It would be a shame if the budgetary problems induced by tax cuts to promote private saving and physical capital result in a cutback in the area of education. It is not at all clear that such a shift in the mix of subsidies would be of net benefit to future

productivity growth.

I conclude that the growth of various tax programs to promote specific inputs into the growth process has gotten out of hand and the United States would be better off to revert to a simple comprehensive tax system that pays greater attention to the old-fashioned notion of raising revenues sufficient to finance expenditures and that is aimed at a uniform tax treatment of income from different activities.

Table 1. *Saving and Investment as a Share of Gross and Net National Product, Selected Periods, 1951–89*

	Actual				Projected
	1951–60	1961–70	1971–80	1983	1986–89
	Percent of gross national product				
Gross national saving	15.8	15.9	16.1	13.3	13.5
Private	16.2	16.3	17.1	17.2	17.5
Federal government	−0.2	−0.5	−1.9	−5.5	−5.5
State and local government	−0.2	0.1	0.9	1.6	1.5
Plus: Net foreign capital inflow	−0.3	−0.5	0.0	1.0	1.0
Equals: Gross domestic investment	15.6	15.4	16.1	14.2	14.5
Nonresidential	10.4	11.1	11.5	10.3	10.5
Residential	5.2	4.3	4.6	3.9	4.0
	Percent of net national product				
Net National saving[a]	7.6	8.1	6.9	2.1	3.0
Private	8.0	8.6	8.0	6.6	7.5
Government	−0.4	−0.5	−1.1	−4.4	−4.5
Plus: Net foreign capital inflow	−0.3	−0.5	0.0	1.2	1.0
Equals: Net domestic investment[a]	7.3	7.6	6.9	3.2	4.0

Source: U.S. Department of Commerce, Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929–74 Statistical Tables*, a supplement to the *Survey of Current Business* (Government Printing Office, 1977), and author's projections.

a. Net saving and investment equals the gross flow minus capital-consumption allowances (the depreciation of existing capital). Net national product equals gross national product minus capital-consumption allowances.

Table 2. *Private Saving and Its Uses in Major Industrial Countries, Five-Year Averages, 1970–79*

Percent of gross domestic product

		Uses of private saving					
Country	*Private saving*	*Business investment*	*Government deficit*	*Net foreign investment*	*Residential construction*	*Inventory change*	*Statistical discrepancy*
Canada							
1970–74	17.8	13.0	−0.8	−0.2	5.3	0.9	−0.4
1975–79	19.6	13.9	2.0	−2.4	5.8	0.5	−0.2
United States							
1970–74	16.4	10.5	0.6	0.1	4.6	0.9	−0.2
1975–79	17.3	10.9	1.3	0.0	4.6	0.7	−0.1
Japan							
1970–74	31.5	22.3	−1.8	1.0	7.6	2.1	0.3
1975–79	29.3	18.1	3.0	0.6	7.5	0.6	−0.6
France							
1970–74	20.9	13.1	−1.2	−0.3	7.0	2.2	. . .
1975–79	20.4	12.4	0.7	−0.3	6.7	0.9	. . .
Germany							
1970–74	21.1	13.6	−1.7	1.1	7.3	0.9	. . .
1975–79	21.0	11.9	1.5	0.7	6.0	1.0	. . .
Italy							
1970–74	26.8	12.4	7.0	−0.4	5.7	2.1	. . .
1975–79	27.2	11.1	8.5	0.7	5.2	1.8	. . .
Netherlands							
1970–74	22.3	13.8	−0.9	1.7	5.8	1.9	. . .
1975–79	19.9	11.7	1.2	0.8	5.5	0.6	. . .
Sweden							
1970–74	14.2	11.1	−4.0	0.7	5.1	1.2	. . .
1975–79	14.0	11.6	1.2	−1.5	4.3	0.8	. . .
United Kingdom							
1970–74	14.8	10.7	−0.1	−0.8	3.3	0.9	0.5
1975–79	17.3	11.4	3.2	−0.9	3.5	0.5	−0.4
Australia							
1970–74	20.5	15.3	−1.2	−0.5	4.9	1.0	0.9
1975–79	19.5	13.9	1.8	−1.8	4.8	0.5	0.4

Source: Computed by the author from Organization of Economic Cooperation and Development, *National Income Accounts of OECD Countries, 1962–1979*, vol. 2 (Paris: OECD, 1981).

Table 3. . *Effective Marginal Tax Rates on Capital Investments, 1980–82*[a]

Type of investment	*1980*	*1982*
Corporate capital		
Equipment	5.4	−4.0
Structures	49.6	37.7
Public utilities	33.2	32.6
Inventories	35.6	35.6
Land	39.9	39.9
Weighted average	34.5	30.0
Noncorporate capital		
Equipment	−2.0	−5.6
Structures	38.8	29.3
Public utilities	24.5	24.1
Residential structures	39.5	33.4
Inventories	32.8	32.8
Land	35.8	35.8
Residential land	40.9	40.9
Weighted average	35.8	32.7
Owner-occupied housing	18.6	18.6
Overall tax rate	28.8	26.4

Source: Don Fullerton and Yolanda K. Henderson, "Incentive Effects of Taxes on Income from Capital: Alternative Policies in the 1980s," presented at the Urban Institute Conference on Reagan's Economic Policies and Long-Term Growth, Washington, D.C., September 1983, table 4.

a. Calculations are based on an assumed 3 percent real after-tax return to investors and a 7 percent inflation rate.

Table 4. . *Average Annual Rates of Growth in Output, Labor and Capital Inputs, and Productivity, by Major Sector, 1948–73 and 1973–81*

Percent

Measure	*Private business*[a]			*Nonfarm business*			*Manufacturing*		
	1948–73	*1973–81*	*Slow-down*	*1948–73*	*1973–81*	*Slow-down*	*1948–73*	*1973–81*	*Slow-down*
Output per hour of all persons	3.0	0.8	−2.2	2.5	0.6	−1.9	2.9	1.5	−1.4
Contribution of capital per hour[b]	1.0	0.7	−0.3	0.8	0.6	−0.2	0.7	1.1	0.4
Multifactor productivity[c]	2.0	0.1	−1.9	1.7	0.0	−1.7	2.2	0.4	−1.8
Addenda: supporting indexes									
Output	3.7	2.2	−1.5	3.9	2.1	−1.8	4.0	1.2	−2.8
Hours of all persons	0.7	1.4	0.7	1.3	1.5	0.2	1.1	−0.2	−1.3
Capital services	3.6	3.2	−0.4	3.6	3.3	−0.3	3.5	4.0	0.5
Combined capital and labor inputs	1.7	2.0	0.3	2.1	2.1	0.0	1.8	0.9	−0.9

Source: U.S. Department of Labor, Bureau of Labor Statistics.

a. Excludes government enterprises.

b. Change in capital per unit of labor weighted by capital's share of total output.

c. Output per unit of combined labor and capital input, equals output per hour minus contribution of capital per hour.

SUMMARY

The structure of the tax system has important implications for economic growth through its effects on incentives to save, invest, and work. However, a focus on tax incentives to promote specific types of economic activity have reached the point where the major effect is to distort the pattern of investment and waste resources.

Saving

1. Tax policy can have very substantial effects in altering the distribution of private saving but the available evidence suggests that its effect on overall saving rates is weak.
2. If we desired to increase domestic saving to finance investment, direct actions by government to reduce its own dissaving (the budget deficit) would be far more effective than any tax incentives for the private sector.

Investment

1. A rise in effective tax rates cannot explain a weakness of investment during the last decade.
2. New research indicates that effective tax rates, despite a rise in inflation, fell dramatically in the 1970s.
3. A major problem of the current tax system is that it taxes different types of investment at sharply different rates, leading to distortions and waste of existing capital.

Labor Supply

1. We often forget that proposals to cut taxes on capital income e to encourage investment requires higher taxes on labor income.
2. While tax rates for capital income have fallen in recent decades, the rate applied to labor income has gone up dramatically, weakening incentives for work.

I believe that the U.S. rate of economic growth would benefit from abandoning the current maze of tax incentive programs and adopting instead a simple tax system that aimed at a uniform taxation of income from alternative sources. Such a change, however, involves some very basic issues of choosing between an income or consumption-based concept of taxation.

From the perspective of improving economic growth, there has been an excessive emphasis on tax incentives for capital formation at the cost of ignoring the importance of reasonable fiscal-monetary policy and the contributions of government to education and research and development.

Senator GRASSLEY. Mr. Jasinowski.

STATEMENT OF JERRY J. JASINOWSKI, EXECUTIVE VICE PRESIDENT AND CHIEF ECONOMIST, NATIONAL ASSOCIATION OF MANUFACTURERS, WASHINGTON, DC

Mr. JASINOWKSI. I am Jerry Jasinowski, executive vice president for the National Association of Manufacturers. I, too, will abbreviate my statement and summarize eight points that I would like to conclude on in this general area of productivity, its relationship to tax policy, and other factors. And I, too, would like to join with Mr. Ture and, I am sure, the other members of the panel in congratulating you and the committee for your attention to this area.

First, some good news. The deepest phase of the productivity decline is probably behind us. The outlook is for better aggregate performance in productivity in 1984 primarily because of the upturn of the business cycle. However, even the trend productivity performance will probably improve in the time ahead because of the decline in energy prices, the maturation of the work force, and other changes that have taken place since the 1970's.

It's too early to conclude definitively that the trend rate has changed, but it seems to me that there is enough evidence to suggest that it probably will. And the cyclical improvements are there to be had.

No. 2, productivity performance depends enormously on stability in the business cycle. Not only because of the impact of year-to-year rates on productivity, but also because prolonged recessions lead to contractions in capital investments and then thus lower the trend rate of productivity growth.

Therefore, the overall posture of monetary, fiscal and tax policy should aim at a stable path for the economy. In this respect, tax policy must be considered in the overall mix of macroeconomic policy. And it's my view that more than any other single factor—although it's quite difficult to document this—the increased fluctuations in the business cycle during the 1970's and the instability in the general economic environment had more to do with the decline in productivity than tax policy, human resource policy, or regulatory policy. And both from a cyclical and trend point of view, it's essential that we maintain monetary and fiscal policies that provide a stable environment for all of those activities in the future.

Item No. 3. Tax policy is more likely to raise productivity when it is specified to impact the factors of production such as capital formation. And in this respect I assume that I'm in some disagreement with what the previous two panelists have suggested, which is to argue the general point of tax neutrality. Tax neutrality is a valuable conceptual benchmark, but as far as I can see most of the evidence with respect to the studies that have been done on tax policy suggests that if you attempt to specify with some degree of linkage on either savings or investment, you are more likely to get the improvements that were aimed at by the policy.

No. 4, the ACRS depreciation reform passed under ERTA has had a favorable impact on business liquidity and capital formation. Econometric studies demonstrated that if ERTA had not been passed business liquidity would have been lower and the contrac-

tion in capital investment would have been more acute during the 1981-82 recession than what actually took place.

Once the economy passed its cyclic trough, moreover, ACRS added positively to the cyclical recovery and capital formation. In this respect, further acceleration of depreciation schedules, for instance for first year expensing for equipment, should be considered in order to further increase capital formation.

No. 5, productivity can also be raised, as Mr. Bosworth has suggested, through increased R&D, although this is an area in which we have far more mysteries about the process by which this occurs than most economists would like to admit.

Two measures that could well stimulate further R&D are before the Congress and should be adopted. These include making permanent the incremental R&D tax credit enacted as part of ERTA and making permanent the moratorium on section 861 of the Treasury regulations governing the allocation of R&D spending.

Senator GRASSLEY. When you spoke of the mysteries of R&D, do you agree with Mr. Bosworth's conclusion that non-research activity is included in the definition of R&D which weren't previously included?

Mr. JASINOWSKI. Well, I think that is clearly a problem, but I would not conclude that we ought not to make the R&D tax credit permanent. I think if there is a definitional problem with respect to how we specify R&D, and there may well be—and he may be right on that—that doesn't mean we ought not to correct that definitional problem and move ahead with the R&D tax credit.

Senator GRASSLEY. I would say for the benefit of all of you that during our consideration of the extension in this committee 3 weeks ago, I guess, when we passed the bill out, we did have the very discussion. I don't know whether we had any conclusions, but at least the very discussion that Mr. Bosworth brought up, but not too much resolution of it.

Mr. JASINOWSKI. Well, as far as I know from the evidence, there is some indication that the definition is a problem. And I think we have to admit that. But it is always going to be a problem in the R&D area. And I think we have got to move ahead, even though we may not have fully adequate definitions in this area.

Item No. 6, which is a little outside of the realm of this immediate hearing, is just my desire to stress that the productivity area can continue to be enhanced by further progress in regulatory reform.

No. 7, in considering tax changes to improve productivity, it is useful to bear in mind that productivity improvements at the single firm level are more likely to take place in a stable economic environment. This goes back to my business stability point earlier, Mr. Chairman.

Therefore, we ought not to have a great deal of additional tax changes in the future as we have tended to do in the last several years. We ought to leave the tax system a bit more stable so that firms can make the plans and decisions that they need to in a more stable environment.

And my final point, item No. 8, is simply to acknowledge, as Mr. Bosworth had suggested, that the human capital area is an important one. There are also a number of other productivity issues of

considerable importance, including how much are changes taking place at firm levels will have an impact. I think that they are going to have a substantial impact. And the human resource area is already documented as being very important. I have left out these areas simply because of a focus of this hearing on productivity and tax policy, but would not want anyone to think that I and members of the NAM do not believe these are very important issues.

That completes my oral statement, Mr. Chairman. Again, I am delighted to be before you.

Senator GRASSLEY. Thank you.

[The prepared written statement of Mr. Jasinowski follows:]

STATEMENT OF

JERRY JASINOWSKI

EXECUTIVE VICE PRESIDENT AND CHIEF ECONOMIST

NATIONAL ASSOCIATION OF MANUFACTURERS

BEFORE THE

SUBCOMMITTEE ON OVERSIGHT OF THE INTERNAL REVENUE SERVICE

OF THE

SENATE FINANCE COMMITTEE

ON TAX POLICY AND PRODUCTIVITY

APRIL 13, 1984

I am Jerry Jasinowski, executive vice president of the National Association of Manufacturers (NAM). NAM is a voluntary business association of over 13,500 companies, large and small, located in every state. Eighty percent of these firms are considered to be small businesses. NAM member companies employ 85 percent of all workers in manufacturing and produce over 80 percent of the nation's manufactured goods. NAM is affiliated with an additional 158,000 businesses through its Associations Council and the National Industrial Council. On behalf of our members, I am pleased to be able to present our views on tax policy and productivity.

I. SUMMARY

The first part of this statement examines the major causes of the productivity decline, both in the United States and overseas. The second part examines the evidence on tax policy as a determinant of economic outcomes. The final section presents a series of recommendations on tax policy options.

During the period from 1973 onward, productivity in the United States fell below its long term postwar growth rate. The causes of the global productivity slowdown had to do primarily with the energy shocks represented by the successive increases in OPEC oil prices, in conjunction with the restrictive reaction of macroeconomic policy, which substantially slowed the growth rate of the world economy. In the United States, the subnormal productivity performance was exacerbated by other factors such as changes in the demographic mix of the labor force, changes in the sectoral mix of output, and regulatory drag.

The productivity slowdown was not caused primarily by increased tax drag during the 1970s. Nevertheless, tax policy represents one alternative for improving productivity by shifting the sectoral allocation of resources in favor of greater capital spending and R&D. The review of the existing research on taxes as a determinant of macroeconomic outcomes presented here is by no means exhaustive, but points in the direction of the following conclusions:

1. The deepest phase of the productivity decline is probably behind us. The outlook is for a better aggregate performance in

productivity in 1984 primarily because of the upturn in the business cycle. However, the trend productivity performance will also improve for several reasons. The decline in energy prices since 1981 will be a critical factor in raising cyclically-adjusted productivity growth. The maturation of the workforce and the resulting improvement in skill levels will also make a positive contribution to productivity growth. Finally, although regulatory reform has not progressed as far as would be desirable, there has been a substantial slowdown in the growth of regulatory costs.

2. Productivity performance depends a great deal on the stability of the business cycle, not only because of the impact of year-to-year growth rates on productivity, but also because prolonged recessions lead to contractions in capital investment and thus lower the trend rate of productivity growth. Therefore, the overall posture of monetary, fiscal and tax policy should aim at a stable growth path for the economy. In this respect, tax policy must be considered in conjunction with the overall mix of macroeconomic policy. Tax policy is more likely to enhance productivity when it is accompanied by monetary and spending policies that work in favor of stabilizing the business cycle.

3. Tax policy is also more likely to raise productivity when it is specified to impact the factors of production such as capital formation. In this repsect, specific tax measures designed to improve business liquidity, lower the user cost of capital and increase savings will have a stronger impact on productivity than tax measures which do not address these areas.

4. The ACRS depreciation reform passed under ERTA has had a favorable impact on business liquidity and capital formation. Econometric studies demonstrate that if ERTA had not been passed, business liquidity would have been lower and the contraction in capital investment would have been more acute during the 1981-82 recession than what actually took place. Once the economy passed its cyclic trough, ACRS added positively to the cyclical recovery in capital formation. In this respect, further acceleration of depreciation schedules, for instance through first year expensing for equipment, should be considered in order to further increase capital formation.

5. Productivity can also be raised through increased R&D. Tax measures to stimulate further R&D should therefore be adopted. These include making permanent the incremental R&D tax credit enacted as part of ERTA, and making permanent the moratorium on Section 1.861-8 of the Treasury regulations governing allocation of research expenditures.

6. Finally, as part of any program designed to enhance productivity, regulatory reform should be accelerated. Regulatory drag has been a major factor in accounting for diminished productivity, and regulatory reform will allow funds now channeled into regulatory compliance to be devoted to greater capital investment.

7. In considering tax changes to improve productivity, it is useful to bear in mind that productivity improvements at the single-firm level are more likely to take place in a stable economic environment. Therefore, there should be no further

dilution of the business tax cuts enacted under ERTA, since by leaving the tax cuts in place, the microeconomic environment for corporate planning will be more conducive to productivity enhancement.

II. THE PRODUCTIVITY ISSUE

Since the mid-1970s, there is evidence of a marked deterioration in the rate of productivity growth both in the United States and throughout the industrial countries. Productivity growth rates initially slackened in late 1973, and declined sharply in 1975. Thereafter, productivity growth underwent a cyclical recovery in 1975-78, although it did not attain the growth rates witnessed during prior expansionary periods. In the United States, productivity growth was well below trend during the later stages of the 1975-79 recovery. Beginning in 1979, productivity growth again became negative in the United States. However, 1983 has witnessed a normal cyclical recovery in productivity growth, comparable to the earlier recovery in 1976. Whether this recovery will be transitory, or whether productivity growth will return to its postwar trend during the upcoming business cycle will depend critically on the economic environment. Changes in tax policy can contribute to a better performance.

The causes of the productivity decline have been documented in numerous econometric studies. On a year-to-year basis, lower productivity growth reflects the aggravated downturns in the international business cycle, manifested in the depth of the

worldwide recessions of 1974-75 and 1980-82. On a cyclically-adjusted basis, the longer-term productivity decline reflects the effects of the successive energy shocks of the 1970s and other factors such as changes in the demographic composition of the labor force, regulatory drag, and changes in the sectoral mix of output.

Cyclical Factors. In the United States, productivity underwent a mild slowdown during the late 1960s, notwithstanding continuous economic expansion at this time, due in part to high rates of labor utilization. Partly for this reason, the productivity decline during the 1969-70 recession was more acute than during prior recessionary periods in the late 1950s, when the output losses were of greater magnitude. However, the sharpest cyclical fall in productivity took place during the recession of 1974-75, which was distinctive both in its extreme depth and its worldwide character. The first OPEC crisis took place at the final stages of a worldwide reflationary boom, when the global economy was already substantially overheated. The resulting acceleration in inflation, further aggravated in the United States by the removal of wage-price controls, induced a sharply restrictive monetary-fiscal reaction at a time when resulting simultaneous fall in demand throughout the industrial countries caused the recessionary trend to be transferred across national boundaries through the channel of diminished trade flows. This combination of events effectively makes the recession worldwide.

Econometric analysis by Bruno (1982) of the world

productivity slowdown at this time confirms that throughout the industrial countries this phenomenon is explained largely by the combination of the energy shock and the contraction in output associated with the restrictive macroeconomic reaction. Bruno (1983) also notes that the decline in productivity in the Third World was less acute at this time in part because of the more countercyclical stance of monetary policy.

To a substantial degree, the same process was repeated following the second OPEC shock in 1979-80 (for an analysis, see Gordon, 1979b). This time, the world economy was moving less rapidly, while the feed-through of energy prices into domestic inflation rates was more gradual, producing a slower decline into recession. In part because of the slower pace of the contraction, labor markets equilibrated more rapidly relative to the fall in demand, with the result that the recession was associated with smaller decreases in productivity and greater increases in unemployment than in 1974-75. By comparison, during the recession of the mid-1970s, the speed of decline was so rapid that employment fell only with substantial lags, leading to a very sharp initial decline in the output-labor ratio. However, the recession of 1980-82 was considerably longer than that of 1974-75, both because of the prolongation of monetary restraint in the United States, and because the appreciation of the dollar impelled the other industrial countries to refrain from countercyclical policies in order to support their exchange rates. The result was that the cyclical decline in productivity at this time lasted for a period of roughly three years.

The contribution of cyclical factors to the slowdown in productivity during the intervening recovery in 1975-79 is less clear, but underutilization of capacity appears to have played some role in other countries. The recovery of 1975-79 was unusually slow in all the industrial countries except the United States, where the looser stance of monetary policy enabled restoration of normal postwar growth rates in real GNP and a full recovery in capacity utilization. Nevertheless, while the American economy had converged to full capacity by 1978, Canada, Japan, and Western Europe continued to experience substantial slack. The role of underutilization of capacity as an explanation for slower productivity growth has been corroborated econometrically for Canada in Helliwell (1983) and for Western Europe in Lindbeck (1983) and Bruno (1982). However, because of the strength of the recovery in the United States, this explanation is largely irrelevant here; the extent to which the slowdown in productivity in the late 1970s is incommensurate with its normal behavior and not readily susceptible to cyclical interpretations in confirmed in Gordon (1979a). As a result, an explanation of this development requires recourse to non-cyclical factors.

Non Cyclical Factors. Of the major non-cyclic components of the productivity decline, the most important has been the change in relative energy prices. In addition to the studies already cited, the rise in oil costs is estimated by Siegel (1979) and Eckstein and Tannenwald (1981) to have accounted for one-third of

the cyclically-adjusted productivity slowdown in the United States since 1973. In addition to their direct impact on factor inputs of energy, the OPEC shocks are estimated to have had a secondary depressing effect on productivity through the capital-labor ratio and the output mix. The OPEC shocks raised the relative cost of capital inputs because of the complementarity of capital and energy; at the same time, they engendered shifts in the sectoral composition of output from energy-intensive manufacturing industries, which typically exhibit high productivity growth, to non-energy-intensive services where productivity growth rates tend to be lower. However, because other causal influences have impacted on these factors, the capital-labor ratio and the output mix must be considered separately from the energy shocks.

The Siegel (1979) and Eckstein-Tannenwald (1981) studies show a substantial role for the capital-labor ratio, which also accounts for roughly one-third of the cyclically-adjusted decline since 1973. The role of capital-labor substitution in other countries is supported in Lindbeck (1983). Conversely, the effect of changes in the output mix was found to be considerably smaller, although not non-existent. In the United States, the capital-labor ratio grew more slowly from the mid-1970s onward not only because of higher energy costs, but also because of increases in the user cost of capital and slack in labor markets associated with the demographic growth of the workforce. It is to be emphasized in this context, however, that there was no non-cyclical decline in capital formation, comparable to the non-cyclic productivity slowdown during the recovery of the late

1970s. Instead, during the late 1970s, the annual rate of growth in real business fixed investment equally or surpassed its growth rate of the 1980s. The capital-labor ratio and productivity slowed mainly because of increases in labor utilization relative to capital.

Finally, several other factors account for the residual in the productivity decline.

The demographic composition of the workforce appears to have slowed productivity growth consistently over the postwar period, although interestingly enough this factor was probably more important prior to the 1970s [Siegel (1979); Eckstein and Tannenwald (1981)].

Regulatory drag, however, has been estimated to be a relatively important factor, although the magnitudes have varied depending on the methodology used. Studies ascribing a significant role to regulatory drag include Christainsen and Haveman (1981) and Denison (1978).

The role of R&D in accounting for the productivity slowdown is somewhat ambiguous (see in this respect Griliches, 1980). However, since R&D constitutes a major factor input to production, measures designed to enhance R&D spending can be used in order to raise productivity over the upcoming business cycle.

The Current Outlook. The current outlook for productivity is for relatively normal cyclical behavior over the recovery. In 1983, non-farm productivity grew by 3.1%, essentially comparable to the recovery in productivity growth that took place in 1976.

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It remains to be seen, however, whether productivity will continue to rise at this rate, or whether it will undergo a consistent deterioration over the business cycle as it did during the late 1970s. Factors working in favor of higher productivity growth at the present time include lower energy prices and the expected cyclical rise in capital investment; despite the high user cost of capital, the contraction in the capital stock since 1980 implies the need for substantial retooling, with real business fixed investment rising in the area of 8%. However, in the long term, the user cost of capital and a slowdown in wage increases associated with slack in labor markets work against major increases in the capital-labor ratio.

In the near-term, cyclical factors will dominate. With real GNP growth in 1984 projected at 5.3%, this is commensurate with growth in productivity of 3% to 3.5% this year. However, the preliminary outlook for 1985 is for substantially slower growth, in the area of 3%. This implies a corresponding deterioration in productivity growth, probably to the range of 1.5% to 2%. Since this slowdown will be fundamentally a result of the projected slowdown in the economy, the implication is that a higher productivity figure for 1985 will require a higher real growth rate and therefore a looser monetary stance. Conversely, the ability of tax changes to affect developments in the near term is relatively limited, and the relevance of the tax measures recommended below must be regarded as long term in their basic thrust.

III. THE EFFECTS OF TAXES ON ECONOMIC ACTIVITY

The relationship between tax policy and productivity must be viewed as primarily long term in nature. Nevertheless, tax changes constitute one of the major policy areas that can be used to raise productivity growth inasmuch as tax codes can be used to influence factor inputs of capital through such mechanisms as depreciation reform. While there is general agreement in economic theory that selective changes in the tax laws can exert a statistically significant impact on capital formation, there is, however, less consensus as to the magnitudes involved. Some discussion of the prevailing theoretical perspectives and existing empirical evidence on the economic impact of tax rates is therefore in order.

3.1 Perspectives From Economic Theory

During the last few years, there has been a major outpouring of research on the impact of general tax policy on economic activity. Theoretically, a series of channels have been proposed through which tax changes impact on the economy. In the neo-classical literature, tax policy operates by altering the rates of return on savings, investment and labor force participation, thereby inducing substitution effects through relative price mechanisms. However, in more conventional models, tax policy affects the economy primarily through liquidity and income-expenditure channels. In this respect, tax policy should

not be regarded as independent from other instruments of demand management. Here, tax changes may be associated with corresponding changes in economic activity, but these effects are subject to the constraints implied by other factors and can under certain circumstances be negated by countervailing influences.

A further dimension of the debate between neo-classical and more conventional economic theory has to do with whether tax policy should be analyzed in the aggregate on a more highly differentiated basis. In the supply-side approach, the effect of marginal tax rates on incentives determines the growth path of the aggregate economy. Following this line of argument, perfect market clearing across sectors implies that there is no reason to differentiate cuts in personal and corporate tax rates. Nevertheless, this "perfect market clearing" property of general equilibrium models has generally been rejected by the rest of the economics profession. Instead, the prevailing direction of theory has been that changes in tax rates exert differential impacts across sectoral lines, and that selective tax changes can therefore be used in order to achieve sectoral transfers of capital and resources.

3.2 Empirical Evidence

GNP and Productivity. The impact of taxes on aggregate economic activity through income-expenditure channels has been a central tenet of postwar Keynesian stabilization theory. A formal representation is provided in Blinder and Solow (1974). In the

Keynesian perspective, tax reductions can be used to achieve countercyclical increases in spending during periods of economic slack, while progressive rates of taxation will tend to slow the economy during periods of high demand because of the cyclical increase in inflation, which will push taxpayers into higher brackets.

There have been comparatively few attempts to test a direct effect for the tax rates on GNP or productivity growth, in part because of the obvious conceptual and methodological problems associated with it. Regressions of GNP and productivity on taxes suffer from excessive aggregation of both the dependent and the independent variables, since generalized tax indicators such as the ratio of revenues to GNP represent additive combinations of revenues derived from multiple sources. Of the studies that have attempted to test a direct impact for taxes on GNP and productivity (for instance the new World Bank study by Marsden, 1983), the evidence is as yet inconclusive.

Partly because of the difficulties involved in working with highly aggregated measures such as total revenues, most studies have focused on the impact of specific tax laws, on more narrowly-defined economic indicators such as investment, consumption, savings, international trade, and labor force participation.

Business Investment. There is considerable evidence that the tax system in the United States has depressed corporate profitability and business investment, particularly during the

more inflationary environment that has prevailed since the late 1960s. This has been extensively documented in Feldstein (1979). There were two major components of this process, the overstatement of inventory profits and the understatement of depreciation costs under the ADR system. Other studies by Feldstein and others (Feldstein & Summers, 1979, Feldstein 1981, 1982, Auerbach, 1981) have demonstrated that a substantial decline in the real rate of return on corporate equity and a rise in the real user cost of capital took place during the 1970s. This depressed capital formation both because investors shifted their asset portfolios away from corporate equity into interest-bearing instruments and because corporations were forced to incur higher debt-equity ratios in order to finance capital expansion. When excess taxation of business income is entered as a determinant of capital formation in full scale macroeconomic models (Eckstein, 1980), the results show a statistically significant impact on investment in both forecasts and ex-post-facto simulations.

Eckstein (1980) indicates that reductions in corporate tax rates would raise the long term growth of the capital stock. An earlier study by Jorgenson and Gordon (1974) using a reduced form methodology concluded that an increase in the investment tax credit would also produce a significant increase in the level of the capital stock over time. The channels through which depreciation reform raises capital formation are twofold. On the one hand, liberalization of depreciation schedules directly raises corporate liquidity and permits greater capital spending through retained earnings. On the other hand, depreciation reform lowers

the effective user cost of capital, and therefore shifts relative prices in favor of greater factor inputs of capital.

External Trade. Studies of the effects of taxes on exports have normally demonstrated a significant impact in other countries, where the business cycle has been more directly dependent on external trade. However, there is preliminary evidence to suggest that taxes have been a factor in trade performance. Studies by Balassa (1978), Tyler (1981) and Tanzi (1981) have found that tax rates on industries producing for exports are negatively correlated with the export volume, and that the absence of taxes on imported imputs to production is associated with higher rates of export growth. However, favorable tax treatment of foreign trade has not been found to offset or compensate for other mitigating factors such as overvaluation of exchange rates.

Savings and Consumption. It is generally accepted by economists that tax changes induce corresponding variations in saving and consumption behavior. Boskin (1978), Summers (1982) and Sinai (1983) have argued that tax changes influencing the real rate of return on financial assets have exerted a statistically significant impact on the savings rate. One of the critical conclusions to emerge from this research is that changes in the savings rate are more sensitive to the real after tax rate of return on assets than to marginal tax rates on personal income. The result is that reductions in personal income taxes such as

ERTA appear to affect the behavior of the economy more through Keynesian income-expenditure channels than by raising savings incentives; the multipliers for consumption from personal tax rates are generally higher than for savings.

Labor Force Participation. The effects of personal tax rates on labor force participation have been difficult to ascertain in part because of model specification problems. While in the supply-side viewpoint tax changes exert a direct impact on work incentives, increases in labor force paticipation following tax changes may actually result from increased demand for labor; the fact that the size of the labor force generally lags the business cycle supports the demand interpretation. Of the various estimates that have been made of the relationship between taxes and workforce participation, the most reliable is probably that of Eckstein (1980). While the elasticity of labor supply with respect to the personal tax burden has the expected negative sign, the magnitude is extremely small. Nevertheless, tests in the other industrial countries have suggested that the magnitudes may be somewhat higher overseas, due in part to demographic differences (for the evidence, see Godfrey, 1975). There is also evidence of a significant role for employment taxes levied on firms such as social security in influencing the demand for labor.

The Effects of ERTA. With somewhat less than three years elapsing since the passage of ERTA in 1981, the evidence on the effects of these tax cuts on the economy is at the present time

only partial. Moreover, isolating the impact of ERTA is methodologically difficult inasmuch as it was accompanied by restrictive monetary policies and other factors such as the appreciation of the dollar which worked in the opposite direction as the stimulus from the tax cuts. Of the existing work, the best evidence is provided by Sinai (1983), which conducts dynamic simulations of the overall path of the economy with the ERTA-TEFRA tax changes in place with the trajectory that would have occurred with 1980 tax laws still in effect.

The simulations suggest that ERTA did in fact exert a significant positive effect on the economy. With 1980 tax laws in place and assuming no countervailing changes in monetary policy, the contraction in consumption, investment and aggregate economic activity resulting from the 1981-82 recession would have been considerably more acute, and the gains associated with the recovery would have been weaker. Over a 1983-85 forecast horizon, the elimination of ERTA with no compensating loosening of monetary policy causes real GNP to be lower by magnitudes of up to 1.2 percentage points. The losses in business fixed investment that would have taken place without ERTA are even greater. In sum, the business provisions of ERTA substantially reduced the cyclical losses in output and investment associated with the 1981-82 recession, and will contribute to raising the cyclical gains during the upcoming recovery.

3.3 Implications

The evidence reviewed here cannot be regarded as unequivocal. Nevertheless, the implications to emerge from the foregoing, from the standpoint of future tax reforms, are substantial.

1. There is abundant evidence confirming that tax changes exert the effects on income, expenditure and indirectly aggregate economic activity predicted by Keynesian stabilization theory. Irrespective of their ostensible objectives, the ERTA personal tax reductions operated mainly by producing countercyclical increases in spending, and in this respect exerted a significant role on aggregate demand.

2. The implication of this finding is that any future tax changes must be formulated with some reference to their short-run stabilization effects, as well as in reference to longer-term objectives such as changing incentives and structural reform of the tax system. When ERTA was enacted, there was a tendency to exaggerate the incentive effects relative to short-run income-expenditure effects. Since, however, these short-run effects appear to have been more pronounced than alleged changes in the structure of incentives in determining the actual behavior of the economy, this viewpoint is inadequate. Instead, the stabilization effects of tax changes on the business cycle should not be ignored in the formulation of any forthcoming tax reforms. Furthermore, future tax changes should be made in conjunction with, rather than at cross-purposes with, accompanying changes in the fiscal and monetary components of demand management.

3. There is also clear evidence that selective changes in the tax laws have influenced capital formation, savings and the sectoral allocation of consumption expenditure. Tax changes aimed at raising productivity and capital formation should therefore consist of specific measures aimed at the determinants of these variables. In this respect, exaggerated claims should not be made in favor of the impact of "general equilibrium" tax changes such as a flat tax on aggregate economic outcomes such as productivity. While such fundamental tax reforms may be desirable for other reasons, there is little ground for believing that they will have significant effects on specific economic indicators such as productivity growth or the capital stock.

IV. POLICY RECOMMENDATIONS

Capital Formation. The most critical element of any tax policy aimed at enhancing productivity is to stimulate additional capital formation. The ACRS depreciation reform enacted in 1981 went quite far in redressing the overstatement of corporate tax liabilities resulting from ADR, but was subsequently diluted by the passage of TEFRA in 1982. Moreover, ACRS did not represent an improvement in depreciation schedules over ADR for certain high technology industries with short-lived assets. At the very least, the existing ACRS depreciation laws should be retained. At some future time, Congress should give serious consideration to further acceleration of depreciation schedules, for instance through the enactment of first year expensing for capital equipment.

R&D Improvement. Notwithstanding the finding that R&D was not closely related to the productivity slowdown, productivity could be enhanced in the long term by greater R&D. Several measures can be taken to improve R&D, including; 1) making permanent the 25% tax credit on incremental R&D expenditures enacted under ERTA, which is currently scheduled to expire at the end of 1985; 2) making permanent the moratorium on Section 1.861-8 of the Treasury Regulations governing allocation of R&D expenditures. Other measures aimed at stimulating R&D such as patent term restoration should also be considered.

Consumption Taxes. Consumption taxes have recently been proposed both in the context of raising revenue and of structural reform of the tax system. In NAM's view, they should be considered primarily in the latter context. Any net revenue increase associated with implementation of a consumption-based tax should be temporary and dedicated solely to the current need for reducing the federal deficit. However, there is some merit to structural reforms aimed at shifting the tax burden from income to consumption.

Greater taxation of consumption would provide the long term benefit of increasing savings, thereby raising aggregate liquidity and reducing interest rates. At the same time, however, it should be noted that this would be primarily a long-run effect, and that the short-run impact would be less favorable. The proximate result of high consumption taxes would be a drop in effective

demand, which would be accentuated by the rise in the price level associated with the addition of the tax to prices. However, the weaker economy would lead to cyclical decreases in interest rates. The resulting decline in the user cost of capital would lead to greater investment and indirectly to higher productivity growth via the capital-labor ratio. In the long term, therefore, the benefits of shifting the tax base toward consumption rather than income would outweigh the short-term costs.

REFERENCES

Alan J. Auerbach, "Inflation and the Tax Treatment of Firm Behavior," in American Economic Review, vol. 71 (1981), pp. 419-423.

Bela Balassa, "Exports and Economic Growth: Further Evidence," Journal of Development Economics, vol. 5 (1978), pp. 181-89.

Alan S. Blinder and Robert M. Solow, "Analytic Foundations of Fiscal Policy," in Blinder and Solow, eds. The Economics of Public Finance, Washington, D.C., The Brookings Institution, 1974.

Michael Boskin, "Taxation, Saving, and the Rate of Interest," in Journal of Political Economy, vol. 86 (1978) pp. 53-527.

Michael Bruno, "World Shocks, Macroeconomic Response, and the Productivity Puzzle," National Bureau of Economic Research working paper #942, 1982.

Michael Bruno, "Petrodollars and the Differential Growth Performance of the Industrial and Middle Income Countries in the 1970s," National Bureau of Economic Research working paper #1056, 1983.

Gregory Christainsen and Robert Haveman, "Public Regulations and the Slowdown in Productivity Growth," in American Economic Review, vol. 71 (1981), pp. 320-325.

Edward Denison, Accounting for Slower Economic Growth, Washington, D.C., Brookings Institution, 1978.

Otto Eckstein and Robert Tammenwald, "Productivity and Capital Formation," in Data Resources Review of the U.S. Economy. February 1981.

Otto Eckstein, Tax Policy and Core Inflation, A Study Prepared for the Use of the Joint Economic Committee, Congress of the United States Washington, U.S. Government Printing Office, 1980.

Martin Feldstein, "Adjusting Depreciation in an Inflationary Economy: Indexation versus Accelerated Depreciation," National Bureau of Economic Research working paper #395, 1979.

Martin Feldstein, "Inflation, Tax Rules and the Stock Market," in Journal of Monetary Economics, vol. 6 (1980), pp. 309-331.

Martin Feldstein, "Inflation, Tax Rules and the Accumulation of Residential and Non-residential Capital" Seminar Paper No. 186, Institute for International Economic Studies, University of Stockholm, November 1981.

Martin Feldstein, "Inflation, Tax Rules and Investment: Some Econometric Evidence," Econometrica, vol. 50. No. 4, July 1982.

Martin Feldstein and Lawrence Summers, "Inflation, Tax Rules and the Long Term Interest Rate" in Brookings Papers on Economic Activity, 1978, pp. 61-109.

Dale Jorgenson and Roger H. Gordon, "The Investment Tax Credit and Countercyclical Policy," Cambridge, Massachusetts, Harvard Institute of Economic Research Discussion Paper No. 373, June 1974.

L. Godfrey, Theoretical and Empirical Aspects of the Effects of Taxation on the Supply of Labour, Paris, Organization for Economic Co-operation and Development, 1975.

Robert J. Gordon, "The 'End of Expansion' Phenomenon in short Run Productivity Behavior," in Brookings Papers on Economic Activity, 1979a, pp. 447-461.

Robert J. Gordon, "Monetary Policy and the 1979 Supply Shock," National Bureau of Economic Research working paper #419, 1979b.

Zvi Griliches, "R&D and the Productivity Slowdown," in American Economic Review, vol. 70 (1980), pp. 343-348.

John F. Helliwell, "Stagflation and the Productivity Decline in Canada, 1974-1982," National Bureau of Economic Research working paper #1185, 1983.

Assar Lindbeck, "The Recent Slowdown in Productivity Growth," in Economic Journal, vol. 93 (1983), pp. 13-34.

Keith Marsden, "Links Between Taxes and Economic Growth: Some Empirical Evidence," World Bank working paper #605, 1984.

Robin Siegel, "Why has Productivity Slowed Down?" in Data Resources Review of the U.S. Economy, May 1979.

Allen Sinai, Andrew Lin and Russel Robins, "Taxes, Saving and Investment: Some Empirical Evidence," in National Tax Journal, vol. 36 (1983).

Lawrence Summers, "Tax Policy, the Rate of Return, and Savings," National Bureau of Economic Research working paper #995, 1982.

Vito Tanzi, Taxation and Price Stabilization International Monetary Fund, 1981.

William G. Tyler, "Growth and Export Expansion in Developing Countries: Some Empirical Evidence, in Journal of Development Economics, vol. 9 (August 1981), pp. 121-30.

Senator GRASSLEY. Dr. Striner.

STATEMENT OF DR. HERBERT E. STRINER, PROFESSOR OF BUSINESS ECONOMICS, AMERICAN UNIVERSITY, WASHINGTON, DC

Dr. STRINER. Thank you. Mr. Chairman, thank you for inviting me to participate in these hearings this morning.

I would like to propose for your consideration two areas where I believe changes in tax policy could increase our productivity. Specifically, I wish to talk about investment in plant and equipment, as well as expenditures by industry and R&D, and how changes in Federal tax policy can stimulate such expenditures in a manner calculated to increase productivity.

That there is a relationship between new plant and equipment and productivity gain is obvious. When expenditures are made by companies to use equipment that reflects new technology and produces a lower unit cost, productivity gains must result. In order to stimulate investment in such new plant and equipment, tax policies permit depreciation.

There are two assumptions that control the setting of the depreciation rate, neither one of which relates often in reality to the objectives of productivity gain.

The first assumption is that expenditures for plant and equipment automatically will be made for the most up-to-date technology or state-of-the-art equipment. This is not necessarily the case. The steel companies of Japan spending the equivalent of $100 million for state-of-the-art continuous casting equipment might be doing so at the very same time that a field company in the United States is spending $100 million for new equipment that, however, reflects an obsolescent technology. Indeed, the comparisons we usually make about levels of investment in specific industries in the United States and in other countries completely miss the point unless we know what type of plant and equipment is being purchased.

Dollar equivalence can mean very little. The second assumption which is explicit in our depreciation policy is that the period for depreciation is necessarily relevant. It may not be. Indeed, in a period of rapidly changing technology, a depreciation rate which is related to how long the tool retains the cutting edge makes no sense if we are now capable of using laser beams for cutting at a much lower unit cost.

In brief, depreciation rates should now be tied to productivity gains, not wear out periods. Tax help should not be given to companies that purchase new equipment unless that new equipment can be shown to be capable of achieving a much lower unit cost of production.

Second, depreciation rates should provide for radical accelerations if such acclerations can result in sharp reductions in unit cost and equally sharp increase in productivity gain.

Depreciation policy as it relates to productivity gains are now necessary. Inflexible time related depreciation policies are obsolescent in an economy based on rapid obsolescence of knowledge and production techniques.

Let me turn now to tax policies that affect R&D. The term "R&D," as once a term of communication and a term of confusion.

That is, it communicates a message but it also obscures vital information which hinders us in our efforts to stimulate productivity. R&D is an umbrella term which lumps three major types of efforts, each one of which has very different implications for productivity gain.

In terms of productivity, generally, basic research is of greater significance than applied research. Applied research is of greater significance than development. Investments in civilian R&D in West Germany and Japan have generally risen at a faster rate than their economic growth, and reached 2.5 percent and 2.3 percent respectively in 1981, compared with 1.7 percent for the United States.

This lower rate of research investment in the United States is not just a recent phenomenon. Our civilian R&D as a percent of GNP has lagged behind that of those other major companies since the mid-1960's. But what is even more disturbing is the degree to which the United States has been spending less proportionately on basic research in recent years and on applied research and development. And this higher U.S. investment in development is occurring in spite of the fact that the development probably has the least impact on productivity than either applied or basic research. I would suggest that is probably where the increase in R&D occurred in the advertising industry.

Between 1975 and 1982, basic research increased by 25 percent, applied increased by 39 percent, and development by 36. Between 1980 and 1982, basic research increased by 3 percent, applied by 11 percent, and development by 8. These data are in constant 1972 dollars and include both the private and public sectors.

Basic research, which is the most valuable form of research for long-term productivity gains, increased the least. Current tax provisions lump all R&D costs and provide the same carrot for truly fundamental new knowledge as for improving, for example, the nature of the package in which we deliver a cake of soap. We should change our tax policy in such a way as to devise substantially more benefits for doing basic research or applied research than for development. It would be sensible to develop an expensing treatment which is significantly different for each of the three components of R&D.

Parenthetically, let me just say in response to what Mr. Bosworth was saying, that the social science research is not included in the tax treatment that was afforded to capital equipment research or regular physical science research. And much of what has been happening in terms of new types of management techniques that we see the Japanese using and we have been importing would fall under the gross definition of social science research so that this would not be permitted the same treatment that research in chemistry or engineering or physics or any of the other areas would be permitted.

I will stop at this point, and permit more time for questions.

[The prepared written statement of Dr. Striner follows:]

"TAX POLICY AND PRODUCTIVITY"

TESTIMONY

by

PROFESSOR HERBERT E. STRINER

COLLEGE OF BUSINESS ADMINISTRATION

THE AMERICAN UNIVERSITY, WASHINGTON, D.C.

BEFORE THE

UNITED STATES SENATE SUBCOMMITTEE

ON

OVERSIGHT OF THE INTERNAL REVENUE SERVICE*

HEARING - April 13, 1984

*Hon. Charles E. Grassley

U.S. Senator

Subcommittee Chairman

MR. CHAIRMAN AND MEMBERS OF THIS COMMITTEE, I AM DELIGHTED TO BE ABLE TO DISCUSS A FEW OF THE IDEAS I HAVE CONCERNING THE RELATIONSHIP BETWEEN TAX POLICIES OF THE FEDERAL GOVERNMENT AND PRODUCTIVITY IN OUR ECONOMY.

I CURRENTLY HOLD THE DISTINGUISHED RANK OF UNIVERSITY PROFESSOR OF ECONOMICS AND MANAGEMENT, KOGOD COLLEGE OF BUSINESS ADMINISTRATION, AT THE AMERICAN UNIVERSITY, HERE IN WASHINGTON, D.C. MY INTERESTS IN PRODUCTIVITY GO BACK MANY YEARS. IN 1954, AS THE FIRST PROFESSIONAL ECONOMIST ON THE STAFF OF THE NATIONAL SCIENCE FOUNDATION, MY MAJOR CONCERN WAS WITH THE EFFECTS OF RESEARCH AND DEVELOPMENT ON ECONOMIC GROWTH. IN 1958 WHILE AT JOHNS HOPKINS UNIVERSITY, I WAS INVOLVED IN A MAJOR STUDY THAT ANALYZED THE EFFECTS OF MILITARY R&D ON THE CIVILIAN ECONOMY. MORE RECENTLY, IN 1980-81, I WAS THE CHIEF ECONOMIC CONSULTANT WITH NBC IN THE PRODUCTION, IN WHICH I APPEARED, OF THE 90-MINUTE WHITE PAPER ON THE PROBLEMS OF U.S. PRODUCTIVITY, SHOWN AT PRIME TIME THROUGHOUT THE U.S. IN JUNE 1981. THE TITLE OF THAT PROGRAM WAS "IF JAPAN CAN, WHY CAN'T WE?" I HAVE SERVED AS A CONSULTANT ON PRODUCTIVITY TO MANY MAJOR U.S. FIRMS, SUCH AS IBM, PPG, EL PASO NATURAL GAS, AMERICAN HOIST & DERRICK, AND SAKS FIFTH AVENUE. TO ITALIAN, AUSTRALIAN AND CANADIAN GOVERNMENT AGENCIES, I ALSO HAVE SERVED AS A CONSULTANT IN PRODUCTIVITY.

SINCE PRODUCTIVITY IS THE REAL "BOTTOM LINE" OF ECONOMIC PERFORMANCE--THAT IS THE MOST EFFECTIVE WAY TO ENLARGE OUR ECONOMIC PIE--ANYTHING WE DO THAT AFFECTS IT SHOULD BE OF MAJOR, CONTINUING CONCERN TO US. TOO FEW PERSONS FULLY COMPREHEND THE IMPLICATIONS OF PRODUCTIVITY GAIN TO SUCH CURRENT PROBLEMS AS INTEREST RATES OR THE SIZE OF OUR GNP AND ITS ABILITY TO PROVIDE US WITH SUFFICIENT RESOURCES TO MEET SUCH NEEDS AS NATIONAL SECURITY, SOCIAL SERVICES, EDUCATION, R&D AND MANY OTHER ITEMS IN OUR FEDERAL BUDGET. IF BETWEEN 1974 AND 1981 THE RATE OF PRODUCTIVITY GAIN IN THE U.S. HAD BEEN 3.5% (CLOSE TO THE AVERAGE OF JAPAN), INSTEAD OF LESS THAN ONE HALF OF ONE PERCENT, THE ADDITIONAL GNP WE WOULD HAVE ENJOYED BY 1981, WOULD HAVE BEEN $469 BILLION, OUT OF WHICH THE FEDERAL GOVERNMENT WOULD HAVE RECEIVED APPROXIMATELY $108 BILLION IN ADDITIONAL TAX REVENUES DURING THAT PERIOD.

I APPEAR HERE TODAY BECAUSE I WOULD LIKE TO PROPOSE FOR YOUR CONSIDERATION TWO AREAS WHERE TAX POLICIES COULD INCREASE OUR PRODUCTIVITY. SPECIFICALLY, I WISH TO TALK ABOUT: (1) INVESTMENT IN PLANT AND EQUIPMENT AS WELL AS EXPENDITURES BY INDUSTRY IN R&D, AND (2) HOW CHANGES IN FEDERAL TAX POLICIES CAN STIMULATE SUCH EXPENDITURES IN A MANNER CALCULATED TO INCREASE PRODUCTIVITY.

THAT THERE IS A RELATIONSHIP BETWEEN NEW PLANT AND EQUIPMENT AND PRODUCTIVITY GAIN IS OBVIOUS. WHEN EXPENDITURES ARE MADE BY COMPANIES TO USE EQUIPMENT THAT REFLECTS NEW TECHNOLOGY AND PRODUCES AT LOWER UNIT COST, PRODUCTIVITY

GAINS MUST RESULT. IN ORDER TO STIMULATE INVESTMENT IN SUCH NEW PLANT AND EQUIPMENT, TAX POLICIES PERMIT DEPRECIATION, WHICH IS A DEDUCTIBLE COST FOR TAX PURPOSES.

THERE ARE TWO ASSUMPTIONS THAT CONTROL IN THE SETTING OF THESE RATES, NEITHER ONE OF WHICH RELATES, IN REALITY, TO THE OBJECTIVES OF PRODUCTIVITY. THE FIRST ASSUMPTION IS THAT EXPENDITURES FOR PLANT AND EQUIPMENT AUTOMATICALLY WILL BE MADE FOR THE MOST UP-TO-DATE TECHNOLOGY OR STATE-OF-THE-ART EQUIPMENT. THIS IS NOT NECESSARILY THE CASE. A STEEL COMPANY IN JAPAN SPENDING THE EQUIVALENT OF $100 MILLION FOR STATE-OF-THE-ART CONTINUOUS CASTING EQUIPMENT MIGHT BE DOING SO AT THE SAME TIME THAT A STEEL COMPANY IN THE U.S. IS SPENDING $100 MILLION FOR NEW EQUIPMENT THAT, HOWEVER, REFLECTS AN OBSOLESCENT TECHNOLOGY. INDEED, THE COMPARISONS WE USUALLY MAKE ABOUT LEVELS OF INVESTMENT IN SPECIFIC INDUSTRIES IN THE U.S. AND IN OTHER COUNTRIES COMPLETELY MISS THE POINT UNLESS WE KNOW WHAT TYPE OF PLANT AND EQUIPMENT IS BEING PURCHASED. DOLLAR EQUIVALENTS CAN MEAN VERY LITTLE. THE SECOND ASSUMPTION WHICH IS IMPLICIT IN OUR DEPRECIATION POLICIES IS THAT THE PERIOD FOR DEPRECIATION IS NECESSARILY RELEVANT. IT MAY NOT BE. INDEED, IN A PERIOD OF RAPIDLY CHANGING TECHNOLOGY, A DEPRECIATION PERIOD WHICH IS RELATED TO HOW LONG A TOOL RETAINS A CUTTING EDGE MAKES NO SENSE, IF WE ARE NOW CAPABLE OF USING LASER BEAMS FOR CUTTING AT A MUCH LOWER UNIT COST.

IN BRIEF, DEPRECIATION RATES SHOULD NOW BE TIED TO PRODUCTIVITY GAINS, NOT WEAR-OUT PERIODS. TAX HELP SHOULD

NOT BE GIVEN TO COMPANIES THAT PURCHASE NEW EQUIPMENT UNLESS THAT NEW EQUIPMENT CAN BE SHOWN TO BE CAPABLE OF ACHIEVING A MUCH LOWER UNIT COST OF PRODUCTION. SECONDLY, DEPRECIATION RATES SHOULD PROVIDE FOR RADICAL ACCELERATION, IF SUCH ACCELERATION CAN RESULT IN SHARP REDUCTIONS IN UNIT COST AND EQUALLY SHARP INCREASES IN PRODUCTIVITY.

ANY TAX POLICY WHICH MAKES IT DIFFICULT FOR THE USE OF NEW TECHNOLOGIES CAPABLE OF HAVING A SIGNIFICANT POSITIVE IMPACT ON PRODUCTIVITY IS A POOR TAX POLICY. DEPRECIATION POLICIES THAT RELATE TO PRODUCTIVITY GAINS ARE NOW NECESSARY. INFLEXIBLE, TIME-RELATED DEPRECIATION POLICIES ARE OBSOLESCENT IN AN ECONOMY BASED ON RAPID OBSOLESCENCE OF KNOWLEDGE AND PRODUCTION TECHNIQUES.

LET ME TURN NOW TO TAX POLICIES AS THEY AFFECT R&D, SURELY ONE OF THE KEY MEANS OF INCREASING PRODUCTIVITY GAINS. THE TERM R&D IS AT ONCE A TERM OF COMMUNICATION AND A TERM OF CONFUSION. THAT IS, IT COMMUNICATES A MESSAGE, BUT IT ALSO OBSCURES VITAL INFORMATION WHICH HINDERS US IN OUR EFFORTS TO STIMULATE PRODUCTIVITY. R&D IS AN UMBRELLA TERM WHICH LUMPS THREE MAJOR TYPES OF EFFORTS, EACH ONE OF WHICH HAS VERY DIFFERENT IMPLICATIONS FOR PRODUCTIVITY GAIN.

R&D IS COMPOSED OF BASIC RESEARCH, APPLIED RESEARCH AND DEVELOPMENT. THEY ARE DEFINED BY THE NSF AS FOLLOWS:

BASIC RESEARCH ADVANCES SCIENTIFIC KNOWLEDGE "NOT HAVING SPECIFIC COMMERCIAL OBJECTIVES, ALTHOUGH SUCH INVESTIGATIONS MAY BE IN FIELDS OF PRESENT OR POTENTIAL

INTEREST TO THE REPORTING COMPANY."

APPLIED RESEARCH INCLUDES INVESTIGATIONS DIRECTED "TO THE DISCOVERY OF NEW SCIENTIFIC KNOWLEDGE HAVING SPECIFIC COMMERCIAL OBJECTIVES WITH RESPECT TO PRODUCTS OR PROCESSES."

DEVELOPMENT IS THE "SYSTEMATIC USE OF THE KNOWLEDGE OR UNDERSTANDING GAINED FROM RESEARCH DIRECTED TOWARD THE PRODUCTION OF USEFUL MATERIALS, DEVICES, SYSTEMS OR METHODS, INCLUDING DESIGN AND DEVELOPMENT OF PROTOTYPES AND PROCESSES."

IN TERMS OF PRODUCTIVITY GAINS, GENERALLY BASIC RESEARCH IS OF GREATER SIGNIFICANCE THAN APPLIED RESEARCH, AND APPLIED RESEARCH IS OF GREATER SIGNIFICANCE THAN DEVELOPMENT. INVESTMENTS IN CIVILIAN R&D IN WEST GERMANY AND JAPAN HAVE GENERALLY RISEN AT A FASTER RATE THAN THEIR ECONOMIC GROWTH AND REACHED 2.5 PERCENT AND 2.3 PERCENT RESPECTIVELY IN 1981 COMPARED WITH 1.7 PERCENT FOR THE US. THIS LOWER RATE OF RESEARCH INVESTMENT IN THE U.S. IS NOT JUST A RECENT PHENOMENON. OUR CIVILIAN R&D AS A PERCENT OF GNP HAS LAGGED BEHIND THAT OF THOSE OTHER MAJOR COUNTRIES SINCE THE MID-1960's! BUT, WHAT IS EVEN MORE DISTURBING IS THE DEGREE TO WHICH THE U.S. HAS BEEN SPENDING LESS PROPORTIONATELY ON BASIC RESEARCH IN RECENT YEARS THAN ON APPLIED RESEARCH AND DEVELOPMENT. AND, THIS HIGHER U.S. INVESTMENT IN DEVELOPMENT IS OCCURRING IN SPITE OF THE FACT THAT DEVELOPMENT HAS MUCH LESS IMPACT ON PRODUCTIVITY THAN EITHER APPLIED OR BASIC RESEARCH.

BETWEEN 1975 AND 1982, BASIC RESEARCH INCREASED BY 25%, APPLIED INCREASED BY 39% AND DEVELOPMENT BY 36%. BETWEEN 1980 AND 1982 BASIC RESEARCH INCREASED BY 3%, APPLIED BY 11% AND DEVELOPMENT BY 8%. THESE DATA ARE IN CONSTANT, 1972 DOLLARS, AND INCLUDE BOTH THE PRIVATE AND PUBLIC SECTORS. BASIC RESEARCH, WHICH IS THE MOST VALUABLE FORM OF RESEARCH FOR LONG-TERM PRODUCTIVITY GAINS, INCREASED THE LEAST. SINCE THE FEDERAL GOVERNMENT ACCOUNTS FOR THE OVERWHELMING MAJORITY OF EXPENDITURES FOR BASIC RESEARCH, WHAT THIS DATA TELLS US IS THAT A TAX POLICY WHICH TREATS BASIC AND APPLIED RESEARCH AND DEVELOPMENT EXPENDITURES IN THE SAME WAY DOES NOTHING TO STIMULATE THOSE TYPES OF EXPENDITURES THAT ARE MOST SIGNIFICANT FOR PRODUCTIVITY GAINS.

CURRENT TAX PROVISIONS LUMP ALL R&D COSTS AND PROVIDE THE SAME "CARROT" FOR TRULY FUNDAMENTAL NEW KNOWLEDGE AS FOR IMPROVING, FOR EXAMPLE, THE NATURE OF THE PACKAGE IN WHICH WE DELIVER A CAKE OF SOAP. I BELIEVE WE SHOULD CHANGE OUR TAX POLICY IN SUCH A WAY AS TO PROVIDE SUBSTANTIALLY MORE BENEFITS FOR DOING BASIC RESEARCH OR APPLIED RESEARCH THAN FOR DEVELOPMENT. IT WOULD BE SENSIBLE TO DEVELOP AN EXPENSING TREATMENT WHICH IS SIGNIFICANTLY DIFFERENT FOR EACH OF THE THREE COMPONENTS OF R&D.

I ALSO THINK IT IS IMPORTANT FOR US TO UNDERSTAND THAT SUCH COUNTRIES AS JAPAN, WEST GERMANY AND FRANCE HAVE DEVELOPED TAX AND FISCAL POLICIES DEDICATED TO HELPING TO ACHIEVE GOALS OF PRODUCTIVITY GAIN. AS I INDICATE IN A BOOK WRITTEN BY ME AND TITLED REGAINING THE LEAD: POLICIES FOR ECONOMIC

GROWTH, PUBLISHED BY PRAEGER PUBLISHING COMPANY, THIS PAST FEBRUARY, WE MUST ADOPT A NEW POSITION WHICH MELDS PUBLIC AND PRIVATE OBJECTIVES. UNLESS WE DO SO, THE OUTCOME IS BOTH PREDICTABLE AND LESS THAN DESIRABLE. TAX POLICIES MUST INCREASINGLY BE SEEN AS A DEVICE FOR PUBLIC RISK-SHARING IN ORDER TO ACHIEVE SOCIALLY DESIRABLE GOALS; PRODUCTIVITY GAIN IS CERTAINLY ONE SUCH GOAL AND A KEY ONE AT THAT.

IN SUMMARY, OUR TAX SYSTEM MUST BE CHANGED TO REFLECT, AT THE VERY MINIMUM, THE FOLLOWING:

1) DEPRECIATION GEARED TO TECHNOLOGICAL OBSOLESCENCE, NOT SET PERIODS REFLECTING EQUIPMENT "WEAR-OUT."
2) A FAVORED TAX TREATMENT FOR BASIC AND APPLIED RESEARCH OVER DEVELOPMENT, AND
3) A MECHANISM FOR BRINGING THE PRIVATE SECTOR AND PUBLIC SECTOR TOGETHER IN A MANNER THAT REPLACES THE ADVERSARIAL ENVIRONMENT, WHICH USUALLY ATTENDS THE DEVELOPMENT OF TAX POLICY, WITH ONE THAT USES TAX POLICY TO WED PRIVATE PROFIT OBJECTIVES TO NATIONAL GOALS OF HIGHER PRODUCTIVITY.

THANK YOU FOR INVITING ME TO PARTICIPATE IN THESE HEARINGS. I HOPE THESE BRIEF SUGGESTIONS WILL PROVE TO BE OF USE IN THE DEVELOPMENT OF NEW TAX LEGISLATION AIMED AT INCREASING OUR NATION'S ECONOMIC PRODUCTIVITY.

* * *

Senator GRASSLEY All right. I would like to ask Mr. Bosworth separately to go into just a little more detail on this point that this disparity implies a potentially large disproportion of allocation of capital. That's on page 7, first paragraph. It was the last sentence you made in your oral presentation at the end of the investment portion.

I would like to have just a little expansion of that concept.

Mr. BOSWORTH. Well, basically, if you are trying to list the benefits to society of a given investment——

Senator GRASSLEY. Let me interrupt. Maybe not just an expansion but some specific things you would relate to it, examples.

Mr. BOSWORTH. Well, specifically—I have a little trouble about what you are after—normally we would think that the contribution to the overall economy and productivity growth is measured by the before tax rate of return for capital. But if you have two assets, both with equal rates of return, and the first has a higher tax rate applied to it people will end up doing much more of the second than of the first.

What we are worried about is that, in fact, you would have some investments with a high rate of social return, but a very high tax rate, a tax rate so high, in fact, that the after tax returns for the individual is very low. On the other hand, we may have other investments where the social return is very low, but the return to the individual is very high. The classic example of these would be what we call tax shelters. There are some investments where you can look at the nature of the investment and conclude that there is absolutely no contribution to productivity growth whatsoever out of that investment, but it has an enormous return to the individual because of all the tax benefits involved.

In fact, you can have an investment project that makes a negative rate of return, yet to the individual, because of all the tax benefits, it is positive. Now if you take a given amount investment resources and you distort the allocation between the high profit and the low profit activities to society, you can end up with a reduction in productivity from that misallocation of capital.

And what has come up out of the new research, which was not highlighted in earlier part of the decade, but has been emphasized in studies of the last 3 or 4 years—this is a very serious problem in the United States, and it has gotten worse. A recent study for example, compared U.S. tax policy to that of other countries—Sweden, Germany, and the United Kingdom. We have the highest variation of tax rates on different types of investment of any of those four countries.

Senator GRASSLEY. I think Dr. Ture has disagreed.

Dr. TURE. Indeed, I was shaking my head negatively. Let me offer two observations about Dr. Bosworth's last comments. One, he points quite properly to the fact that one can observe in our economy some kinds of capital in which there is an extremely high pre-tax rate of return and also very high marginal tax rates applied to the return.

Now I would suggest to Dr. Bosworth that he ought to take a look to see whether or not he has explanatory and dependent variables in the right sequence. Very likely, one of the major contributing factors to the very high pre-tax rate of return of that particular

kind of capital is the very fact of the high, very high, marginal tax rate that is applied to it, which in turn makes that kind of capital very costly to acquire and to hold, which in turn means that there is a relatively scarcity of that kind of capital, which unless laws of production have been repealed—I don't think so—means that their pre-tax returns, their marginal productivity, by virtue of that scarcity, will be very high.

So far as the high degree of disparate treatment of different types of investments in the United States and abroad, I would be the last person in the world to deny that we have an enormous variety of tax rates applied to different kinds of saving and investment in the United States. But we are in no way unique in this regard.

The major difference between us and other jurisdictions is that when we differentiate the tax treatment of a different type of capital, we put it down on paper in the Internal Revenue Code and the regulations issued thereunder.

In other jurisdictions, that has not been anywhere near the same extent done. And, in fact, the differential rates are achieved by negotiation between the taxpayer and the tax service. That kind of information is very difficult to round up for purposes of any solid research. And I suggest that Dr. Bosworth's findings as he reports them have, in fact, ignored that kind of differential.

Mr. BOSWORTH. I would only respond to the first part. The second part I have no quarrel with. The first part is to make exactly the point I'm trying to make. You have some investments which have very high returns to society and aren't done precisely because they have a high tax rate on them. I'm not disagreeing in any way that it's a problem. That there are very productive investments out there with high marginal tax rates. At the same time, there are very unproductive investments out there that have very low tax rates. That's just the point.

What the survey is saying is exactly the observation that is being made about the distortion in tax rates on different types of investment. You would like to have a tax system in which the tax rate on different types of investment are all the same. And so the people will make the decisions on where to allocate that according to those assets that have the highest before-tax rate of return.

Dr. TURE. I would agree with that entirely. Of course, the choice that policymakers confront is whether or not they ought to equalize effective marginal tax rates by raising all lower tax rates or by reducing all higher ones. Suppose we were to impose a 500-percent excise rate on all consumer durables. And then with respect to, say, refrigerators reduce that rate to 475 percent. Would good policy call for raising the rate on refrigerators to 500 or reducing the rate on all others to 475 or less?

That's the question that you, Mr. Chairman, and your colleagues face all the time. For the most part, what you hear, and the suggestion made to you, is not to move toward complete neutrality with respect to the saving consumption choice, but, in fact, to equalize the penalty against saving across all kinds of saving outlets. I think that's the wrong choice for you to make, and I hope you won't make it.

Senator GRASSLEY. Your point on neutrality then would lead me to a question for all of you. That if the tax system were more neutral, what's your feeling about whether or not the ordinary market forces would be sufficient to increase productivity?

I guess we can go from Mr. Bosworth and then across.

Mr. BOSWORTH. I would only pick up, I guess, on the point that Mr. Ture made. He is quite right to emphasize that. Neutral at what average marginal tax rate?

However, I do feel strongly that the available evidence very strongly supports the view that investment in U.S. capital markets is allocated by private people very efficiently in respect to their own-after tax rate of return. So I would say that it would be allocated by the private market system, I believe, in a very efficient fashion except for maybe a few exceptions where we could identify them, where there are true market failures. Perceptions, misperceptions of very high risks, for example.

Or society may feel it necessary to give some extra incentive. But, in general, that's not the problem in the United States. We have a very efficient, very elaborate, very sophisticated capital market to allocate funds to investments with high returns.

Mr. JASINOWSKI. Mr. Chairman, I think a lot of it has to do with what one has in mind when one uses the term neutrality. And I would like to make two points.

First, I, as the rest of the panel, learned all the values in our technical training about neutrality as a general conceptual standard. I do think that one has to ask neutral with respect to what. First, I think it's important to clarify the distinction between savings investment and consumption. And I think several of the panelists have made the point that they would support consumption, broad-based consumption taxes, as I would because of existing biases against savings or because of their view that however you define neutrality, our improvements on productivity could be somewhat enhanced by moving toward a broad-based consumption tax versus further efforts to deal with the savings question.

Second, on the investment side, it seems to me that there probably are too many preferences in the tax code, and we ought to eliminate some of those and try to make the system more neutral with respect to assets. And the studies that Mr. Bosworth cites seem to me to have some credibility to them.

My own view is that one way to deal with that is to move to more immediate expensing of capital assets so that we don't have the kind of disjunctures that we presently have in the depreciation rules. But that is a very expensive proposition. And so to get to neutrality is going to cost a lot of money.

Dr. TURE. If we had a much more narrowly neutral tax system, at least with respect to the saving-consumption choice, I think there would be productivity gains at two levels. The first level we would eliminate with that kind of a tax structure would be the existing tax biases against saving and in favor of consumption. We would, therefore, wind up sooner or later with a substantially larger fraction of our resources allocated to capital formation, and we would have a higher capital-labor ratio than we now have with probably a higher quality stock of capital.

But we would, therefore, I expect, have at that macro level a more rapid or higher level of productivity and—very likely—a more rapid rate of its advance primarily for labor, but as well for capital input.

At a second level, as the observation has been made by both of the panelists to my right, we would certainly have much less distortion than we now have with respect to the allocation of capital resources among alternative uses. The kind of really neutral tax system in this respect that we should seek is one which does allow the immediate offset against taxable income of all current saving, and all current capital formation. In a tax system of that sort, of course, there is no differential with respect to the impact of the tax on alternative kinds of capital. There is certainly one with respect to the existing tax laws, which are highly biased in favor of some and against other types of capital, but if this type of tax system were implemented, that is, a really truly broadly-based consumption based tax, the tax would fall neutrally with respect to all types of capital.

Senator GRASSLEY. Dr. Striner.

Dr. TURE. Human and nonhuman capital, that is.

Dr. STRINER. Well, let me say this. Whenever I hear the term "neutrality" or the term "distortion" used, it reminds of the fact that that person, which includes me undoubtedly, starts with a set of values. And I doubt that our tax policy can be much more neutral than our fiscal policy. We have arguments about industrial policy, but I'm sure that there are very few members on the Republican side of the Senate which would choose undo the Morrill Act. I assume your state was heavily affected by the Morrill Act, which was an industrial policy established in 1862 to achieve an increase as quickly as possible, in the supply of skilled individuals in the agricultural and mechanical fields. It brought together the private sector, the farmer, with State government, county agents, and the Federal establishment, to produce the highest productivity agricultural sector in the world.

In looking at the tax policy as it relates to productivity in Japan and West Germany, I find very little time spent on this term "neutrality." I think these countries have been able to bring their leaders in industry and government together and try to determine what they want to achieve, together, for the social and economic objectives of the country. They tailor their tax policy, their fiscal policies, they tailor their antitrust laws to achieve those objectives. So I doubt that it would help us to move in the direction of increasing productivity if we focus on a so-called "neutral" tax policy. I think you are going to have to target your tax policy, and you are going to have to have different types of tax policies in order to achieve higher productivity gain.

I'm not as optimistic as Mr. Jasinowski is. I looked at the third and fourth quarter increases in productivity, and I notice that the rate of gain in the fourth quarter has begun to slow down over the third quarter. This comes at a very unfortunate time when we hear all of the hypo coming out of Business Week and some of the other magazines about this new major thrust in terms of productivity and the problem is all over with. But it's not.

Senator GRASSLEY. Your previous point that the neutrality of the tax code ought to take a lesser priority than having our government encourage dialog among labor and business leaders—is that what you are saying?

Dr. STRINER. That's right. If you worry about productivity, Senator, you are going to have to start moving away from some of the fantasies that we have had that the market forces alone will be able to achieve the objectives that we have before us. I don't think they will.

With 20 to 30 percent of individuals over 16 functionally illiterate, I doubt that the market forces will move rapidly enough, that enough wisdom will suddenly be in the minds of the electorate, to do what has to be done in the educational area.

In terms of R&D, I think the same problem exists.

Senator GRASSLEY. Well, in the case of people being illiterate, the private sector has responded to that. Business has taken on some of that responsibility themselves of improving literacy and understanding of mathematics to some degree. There is a trend to that in businesses in America.

Dr. STRINER. I don't think either you or I would like to depend on the fact that there will be enough of an involvement by the private sector to deal with the enormity of the problem that we are confronted with.

Senator GRASSLEY. I agree with you. I'm just saying that there is some private sector solution evidenced in recent years.

Mr. JASINOWSKI. Mr. Chairman, I would like to come back and take another try at this. It seems to me as was suggested we are quibbling over some things which are not as consequential as others. It seems to me that most of the members of the panels would support eliminating the obvious distortions in the tax system to the extent that we could get agreement on those distortions.

And some of the studies cited earlier would do that. So then we could move toward some greater sense of neutrality. Having said that, my understanding was that people didn't want to go to the extreme of kind of total—I mean neutrality at some point is a concept which I can't even quite comprehend. It's a little like infinity. So I don't think pure neutrality is possible.

Therefore, it seems to me the second thing that is of consequence is that people are trying to eliminate one of the distortions by shifting toward a broader base consumption tax. That's important, I think. And I'm not sure everyone is agreeing with that, but that's the point I'm reemphasizing again.

And then, third, moving to the capital side, whether or not you can get complete neutrality or not, there is, I think, some view that tax policy can influence capital investment and increase it in the aggregate. And perhaps we need to look at something like expensing as a means for decreasing the misallocation within the capital area. So I don't know that it's an either/or in a black and white sense. And that would be my second run at it.

Senator GRASSLEY. When this question is done, I have just one more question, and then we will end the hearing. Dr. Ture.

Dr. TURE. Let me make my response as brief as I know how to make it. On this question of tax neutrality I am much less eclectic or ambivalent on it than Dr. Jasinowski. I think we can define neu-

trality quite precisely. I have attempted to do so in my testimony. I shant impose on you at this point.

I think there is a major philosophic question that has been posed. I have to say in all candor that Dr. Striner—whom I have known for many years and fondly—his observation on this score strikes chills to the heart and brings terror.

In essence, what he says is we cannot rely on market forces, and we must rely rather on policymakers and bureaucrats who execute policy to determine where productivity gains are likely to be at a maximum. I think that there is no evidence in history to suggest that is true. And every evidence in history to suggest that it is wrong.

The view that we cannot rely on illiterate individuals to know their own economic best interest, and that people in the public sector know better what is better for them, is the kind of elitist notion which I think will produce disaster for the economy and the body politics.

I'm delighted to observe that though the Congress is frequently tempted with that notion that it by and large rejects it. And I hope it will always continue to do.

I think we have to rely on the market, and I think what we need is a most nearly neutral public policy environment in which the market can and will efficiently allocate resources.

Senator GRASSLEY. Well, I think it's a case of sometimes all of us try to be elitists in some areas. Some try to be elitists all the time. And then there are some that never try to be.

Dr. STRINER. Could I respond by saying this? Like Dr. Ture said, we have been old friends for a long time and we were next door neighbors and we often were not able to complete mowing our grass when we got involved in discussions along these lines.

I think that what I said has been misinterpreted. I did not say that the market forces could not deal with various problems. What I am saying is that since the beginning of this country, with the first Secretary of the Treasury, Alexander Hamilton, in his report on manufacturers, he stressed the vital role that the Federal Government would have to play in the development of our economy.

And I think that what we often wind up with is the fallacy of the excluded middle where everything is *either* this or that. And I think that in the last several years we have moved into a debate which has not been productive because we tend to see the Government and the private sector in an adversarial relationship. And I don't think that this country has built its high rate of productivity gain in the past based on that relationship. And I stress the example of the Morrill Act, which brought the U.S. Government into a key relationship through subsidies in order to improve our educational system in one specific area.

With regard to the functionally illiterate, I'm sure of the fact that they know how to make decisions if they had the means. I would say that unfortunately since they are functionally illiterate and disproportionately unemployed and unemployable, they are not in a position to participate in our manpower needs and provide productivity gains. In their situation, there is little they can do without the help of government. And I don't think there is any argument about that.

Senator GRASSLEY. All right. I am not going to ask that last question. It dealt with R&D. I will consult with staff, if we should pursue it. If we do, then we will submit it to you in writing.

I want to thank all of you. And since all of this panel is in town and you know my desire to continue dialog on this with further hearings—just generally it's a long-term project—I would encourage you individually or collectively for you to keep in touch with me or my staff because we would like to draw it to a conclusion effecting changes in tax policy, if that is possible.

Thank you very much. Our meeting is adjourned.

[Whereupon, at 12:05 p.m., the hearing was concluded.]

[By direction of the chairman the following communications were made a part of the hearing record:]

ASSOCIATION for the ADVANCEMENT of PSYCHOLOGY

Statement on behalf of the

AMERICAN PSYCHOLOGICAL ASSOCIATION

and the

ASSOCIATION FOR THE ADVANCEMENT OF PSYCHOLOGY

on

Section 2175 Medicaid Freedom of Choice Waivers

submitted to the

Subcommittee on Health

Committee on Finance

U.S. Senate

April 13, 1984

Honorable David Durenberger, Chairman
SD219 Dirksen Senate Office Building

1200 Seventeenth Street, N.W., Washington, D.C. 20036 • Phone (202) 466-5757

36-192 O—84——15

Mr. Chairman, Members of the Subcommittee:

Thank you for the opportunity to present written comments on the implementation of the section 2175 Medicaid freedom of choice waiver activities. The Association for the Advancement of Psychology and the American Psychological Association, with its over 72,000 member psychologists nationwide, have serious concerns about the effect of the waivers on the quality and access of health services to the poor, Medicaid beneficiary. We would appreciate it if you would enter our statement of concerns regarding the impact of section 2175 waivers into the hearing record on this matter.

Medicaid is designed to provide partial federal support for what are essentially state health programs to aid the most needy within their jurisdictions. From its inception, it was recognized that both eligibility standards and benefits under Medicaid should be nationally uniform with certain allowances for adjustments for cost-of-living deferentials between states. The original purpose of the freedom of choice provisions of Sec. 1902 (a)(23) of the Medicaid statute was to assure that Medicaid recipients would have the same access as non-Medicaid citizens to health care and not be relegated to an inferior treatment program in their respective states.

The objection that is now being raised is that the freedom of choice provisions hinder states in their efforts to seek and commit the Medicaid populations to the least costly, though presumably equal quality care.

The problem with removing, by waiver request, some of the major federal standards for the Medicaid program is that it further exacerbates the variability among states, especially in regard to access and quality of care. With regard to

mental health services in particular, physicians are notably without specialized training in the detection, diagnosis and treatment of mental and nervous disorders. Yet the majority of states who receive waivers from the freedom of choice criteria, use them to institute case management systems with physicians serving in a gate-keeper capacity.

States may well need flexibility to determine the most efficient method of providing more economical services to the Medicaid beneficiary, but imposing strict regulations on the exercise of self-determination in the choice of provider and choice of setting stigmatizes the Medicaid beneficiary, removing the recipient of Medicaid services from the mainstream of health care on an income measurement criteria. Abolition of the beneficiaries right to choose establishes a social caste system within the health care market affecting both beneficiaries and providers. It separates the Medicaid recipient from those who are not limited in where they can seek health services; and, it necessitates that the service provider choose between committing his practice to low reimbursement, high volume, Medicaid practice, or give up Medicaid patients altogether.

The population needing mental health benefits is especially sensitive to stigma in designated coverages outside of the mainstream of health care. A blatant example of the way this happens is a pending waiver request for the state of Utah, which seeks to create a prepaid health plan to provide comprehensive clinic services and day treatment services to the developmentally disabled and mentally retarded, adult mentally ill, child mentally ill, frail elderly, adult handicapped, and chronic substance abusers. If granted, this waiver will isolate a class of persons in need of certain services in a manner which is insensitive at best and discriminatory at worst.

Again using Utah as an example, an earlier waiver authority has already been used to implement a case management system, under which Medicaid beneficiaries are

required to choose a primary care provider. They may choose this provider from a group of fee-for-service physicians or from one of the two HMOs. These case managers are responsible for patient care and all referrals to specialists, labs, hospitals, and pharmacies. The state later expanded its waiver efforts to also implement a selective provider contracting program for hospital services.

It has long been known that primary care case management systems are a two-edged sword. They can increase access to medical care for recipients, encourage greater use of primary and preventive care, decrease overutilization and inappropriate utilization, increase quality and reduce program cost. Unfortunately --- as painful experience has shown --- such systems can also decrease access to care, result in underutilization of services, lock recipients into poor quality or inappropriate providers, and ultimately increase Medicaid costs. Though this may not be the case in Utah, in Wisconsin, for example, mental health services must receive prior approval by a county mental health board if the services are provided by a psychologist or social worker. A psychiatrist need get no such prior authorization. This is an obvious inequity of the system.

The potential for developing problems such as those mentioned above is particularly strong in capitated systems where the providers of services make more money by providing less care. Congress has recognized these potential problems in enacting provisions such as section 1903(m)(2) of the Social Security Act, (42 U.S.C. 1396b(m)(2)) which provides some protections.

Whether case management systems will promote health care for the poor or undermine an already shaky Medicaid system is not clear. Certainly the manner in which they are planned, implemented and monitored will be critical. Care must be taken that reports and comments by many public officials and analysts touting the positive potential in these systems, particularly those systems employing capitation, not be viewed without recognition of their negative aspects. Negative aspects

generally receive minimal attention in the publicized reports. The systems are often cheered as the panacea of Medicaid reform and cost-containment, without acknowledging that they can open a pandora's box of problems.

It is the needy people whom the program is supposed to help that often suffer the most from this lack of attention to potential problems by the advocates of these systems. The pursuit and establishment of the system itself is all that matters -- the actual problems experienced by the recipients of the services are dismissed as growing problems, if considered at all. Symbolic of this focus is a recent audit letter from HCFA officials to representatives of Arizona's problem-racked "AHCCCS" capitated system. The letter congratulates program officials on their work in creating and implementing the system, and only later notes that the system has problems of "eligibility, enrollment, and coverage." Furthermore, mental health services are largely ignored by AHCCCS and left to the counties to administer.

States are rushing to implement case management systems with little understanding of how complicated they are. One would not expect that a $180 million business with 150,000 customers would take only 4 months to set up, but that is exactly what Arizona did in establishing the Arizona Health Care Cost Containment System known as AHCCCS.

The enrollment process for many case management systems depends on adequately merging three different enrollment data sources: federal SSI tapes; state AFDC tapes; and county medically needy information. Yet after a year of operation, AHCCCS is still without a workable system to enroll eligible patients. Thousands of poor have been "lost" in the computer and enrollment delays and mix-ups lasting several months have resulted.

Similarly, systems to monitor access and quality are inadequate. Freedom of choice waivers to restrict recipients to certain providers are predicated on state promises to ensure access and quality. Yet, too often, case management systems

have no mechanism in place to determine the amount and kinds of services provided enrollees.

In the fee-for-service system, the obvious incentive is for physicians and hospitals to provide excessive care; the more care provided, the more money made. In a capitated case management system the exact opposite incentive exists: the less care provided, the more money made. Utilization controls are needed in a fee-for-service system to prevent overutilization and the provision of unneeded care; in a case management system, utilization controls are needed to prevent underutilization and the denial of needed care.

Utilization controls were absent when California instituted its Prepaid Health Plans (PHP) system in the 1970s. Clinics which promised to be open 24 hours a day, seven days a week were actually open only a few hours a day; plan enrollees were told to go to the hospitals for emergency care but the hospitals had never heard of the plan. Needed specialty care was often not available.

The only large-scale Medicaid case management system since California's, Arizona's AHCCCS program, has been similarly negligent. AHCCCS's Medical Director Dr. Jeffrey Schwimmer, resigned on January 31, 1983, less than two months after taking the job. He charged that he had received hundreds of complaints about poor, inadequate and abusive care, complaints which MSGI ignored. Dr. Schwimmer found that some AHCCCS doctors refused necessary but expensive care and that "in extreme cases, plans (doctors greups) have actually attempted to disenroll these high-risk utilizers from the plan."

Quality is also an issue in Louisville's Citicare capitated system. Physician prior authorization is needed for all emergency care except care needed to prevent death or permanent impairment. This authorization is often difficult to obtain as several primary care physicians are not easily contacted and have been reluctant to

authorize care. In several documented instances, Citicare patients were denied needed emergency care.

Problems have also occurred in Louisville when physicians refuse to refer their Citicare patients to specialists, especially to non-physican providers such as psychologists.

Even basic access issues such as insuring that patients enrolled in capitated systems are no more than twenty minutes away from primary care are not addressed. Citicare, for example, has no contracts with physicians in twelve of thirty-two zip codes in Jefferson County, the area covered by the program.

Patients enrolled in capitated case management systems with access or quality complaints are often blocked from voicing those complaints due to inadequate and complicated grievance procedures.

Case management systems do not guarantee Medicaid savings. Estimates are that per capita cost for enrollees in AHCCCS are 27% higher than nationwide Medicaid per capita costs.

In Monterey, the County is at risk for cost overruns,as it receives a capitated rate from the state per Medicaid enrollee. While the Monterey plan appears to have reduced emergency room and hospital utilization through increased access to primary care physicians, it has lost money on nursing home care as the capitated rate received from the state for Skilled Nursing Facilities is approximately $500 a month below what the county has to pay for this service. More careful cost calculations would have avoided this problem.

In a state such as Arizona where there is a scarcity of both psychologists and psychiatrists, and where the state AHCCCS largely ignores mental health services, special problems occur.

Arizona relies exclusively on low bids to determine which providers could service particular eligibility groups. This resulted in the Maricopa County (Phoenix) health system losing about 15,000 of its AHCCCS patients in the programs' second year. As the provider of last resort in the Phoenix area, the county services many patients who are uninsured, severely ill and/or have special needs; as a result the county system has above average costs and has difficulty in price competition with providers who do not have such obligations.

The excluded groups had relied on the county system as their regular source of care. County facilities provided the services most accessible to them. These people suffered severe disruptions in care patterns. In addition to which the county announced that it would have to lay off hundreds of employees at its hospital, reducing the staff there by 25%. Area doctors protested that the constriction in services would result in the "abandonment" of 80,000 indigents in the county, many of whom were in need of mental health, alcohol and drug abuse treatment.

Mr. Chairman, the human cost cannot be ignored in our haste to save Medicaid dollars. Federal standards exist to ensure access and quality of care. We must proceed with extreme caution in granting yet another waiver from these standards to allow states to establish unproven and hastily designed systems which ignore the basic freedom-of choice in health care for an entire class of health care beneficiaries.

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EXECUTIVE DIRECTOR
Frederick D. Goss

April 13, 1984

Attached is statement from The Newsletter Association, representing over 800 publishers of newsletters and specialized information services, presented to the Senate Committee on Finance, Subcommittee on IRS oversight concerning the "Impact of the Tax System on Productivity and Economic Growth".

Witness for The Newsletter Association is Mr. Tod Sedgwick, Publisher of Pasha Publications in Arlington, Virginia and a member of the NA Board of Directors.

Submitted by,

Frederick D. Goss
Executive Director

April 13, 1984

STATEMENT OF THE NEWSLETTER ASSOCIATION

Presented before the Subcommittee on IRS Oversight & Committee on Finance

U. S. Senate

My name is Tod Sedgwick. I am publisher of Pasha Publications, a newsletter publishing firm in Arlington, Virginia. I serve on the board of directors of the Newsletter Association and am grateful to the committee to have this opportunity to speak to you on the association's behalf.

The Newsletter Association is the international non-profit trade association representing the interests of publishers of newsletters and specialized information services. The 800 members of the association currently publish some 2,000 newsletters covering almost every conceivable business and consumer subject area.

The Newsletter Association would like to draw the attention of the committee to an inequity in the tax code created by the enactment of the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) in its treatment of unincorporated newsletter publishers.

TEFRA amends Section 57(a) of the Internal Revenue Code of 1954 to treat "circulation expenditures" of unincorporated publishers as a tax preference item and subjects these expenditures to an alternative minimum tax of 20%. The Newsletter Association recognizes that the purpose of TEFRA was to raise additional revenues for the federal government and quite readily concedes that no individual or group likes to pay additional taxes.

However, we believe we can fairly demonstrate that the treatment of circulation expenses of unincorporated publishers as a tax preference item is illogical, unjust and unfairly punishes small publishing concerns in the critical early stages of their growth.

First, we find it illogical to tax newsletters on their selling expenses. More than 95% of all newsletter subscriptions are sold by direct mail advertising,

treated as circulation expenses by TEFRA. No other business, to the best of our knowledge, is taxed on their selling expenses.

Second, the TEFRA provision springs from an inadequate understanding of the economics of newsletter publishing.

Under TEFRA, unincorporated publishers are given two options: (1) continue to treat circulation expenditures as a current-year expense, as at present, and pay the tax preference minimum tax as applicable, or (2) capitalize the expense and amortize it over a life of 10 years.

We presume this period was selected to reflect the useful life of subscriptions gained through direct-mail promotion. But this presumes an overall renewal rate of about 90%, which is extremely rare in the publishing business. The newsletter industry's experience is that newly created newsletters have a first-year renewal rate of about 50%, while newsletters that are one or more years old average a 70% renewal rate. This means that the useful life of a new subscription is two to three years, instead of the 10 years stipulated by TEFRA.

This measure, as it applies to newsletter publishers, penalizes not sophisticated investors but small businessmen who are risking their own capital on an already high-risk enterprise.

Newsletter publishing is a high-risk business. The Newsletter Association estimates that about 50% of all newsletters launched fail, usually within the first year.

The newsletter industry is mainly a cottage industry, made up of individuals with expertise in a particular area, who start their newsletter in their kitchen or garage. For this type of newsletter publisher, without the expertise and capital of an established firm to support them, the casualty ratio is higher than 50%.

For a new newsletter venture, promotion or circulation expenses are usually the largest single cost. Commonly, publishers need to spend more than 100% of the first year's revenue to acquire a subscription. They do this in hope of delivering

a quality editorial product that will result in satisfactory renewal rates and profits in later years.

Taxing entrepreneurs on their promotion expense just as they are attempting to launch their newsletter will make an already difficult business that much more treacherous. We submit that TEFRA's application will have an unintended chilling effect on the establishment of new specialized publishing businesses and restrict the flow of information in the United States.

However, our largest objection to the TEFRA provision is that it is inequitable. It applies only to unincorporated newsletter publishers. The very largest, well established firms in publishing newsletters and other periodicals are not affected. Why should an unincorporated publisher, normally small and much newer in the business, be subject to a tax which the corporate giants are not?

Initially, it would appear that unincorporated publishers could solve this dilemma by incorporating, but this is not as simple a solution as it appears. We suggest that one of the stated purposes of revising the tax code in recent years has been to eliminate corporations set up solely for tax purposes. The TEFRA provision as it relates to circulation expenses will create a number of such corporations in the newsletter business. Moreover, publishers who have been operating as a sole proprietorship or partnership will find, if they investigate incorporation, that the amounts of deferred subscription income which they have on their books is subject, under Section 351 of the Internal Revenue Code, to taxation as ordinary income on the date of incorporation, leaving them, quite possibly, with no alternative but to sell the business.

Finally, we contend that this provision defeats its own purpose of raising revenues. The provision will stifle fledgling newsletter enterprises at the early stages of their growth through taxing their promotion expenses. As a result, they will be unable to grow to the point where they can employ more people, pay taxes on their profits and stimulate the economy.

Accordingly, the Newsletter Association strongly urges the repeal of the provision in TEFRA that treats circulation expenses as a tax preference item.

Alternatively, Congress could make this provision effective only for limited partners, or passive investors, so that sole proprietors and partners putting their own capital on the line to try to build a small newsletter business are not penalized, as they are now.

Another solution would be to restrict the provision to start-up promotion expenses. In the start-up phase of promoting a newsletter, promotion expenses tend to be substantial, while much of the revenues are deferred under the accrual method of accounting. This imbalance can produce losses for the sole proprietor or partner. However, this distortion evens itself out in subsequent years, when revenues deferred from the first year become recognized, and promotion expenses are lower.

Since renewal rates for start-up newsletters are 50%, we propose that first-year start-up expenses could be a tax preference or be amortized for two years.

In fact, in reviewing the legislative history of the treatment of promotion expenses, the Treasury prior to 1954 did distinguish between start-up and later-year promotion expenses. This makes sense, but the current law taxes not only start-up promotion expenses but also the substantial cost of replenishing 30% of a newsletter's subscribers every year in order to maintain a constant level of circulation.

We also recommend that sole proprietors and partners who have incorporated as a result of this legislation should be able to do so tax-free, since many of these individuals are currently between a rock and a hard place. They have to borrow money to pay the tax, and they can't afford to incorporate because they would have to pay ordinary income tax on all their deferred subscription income.

We are still at a loss to know the reason for this tax preference item, since

it was inserted into TEFRA in the final hours of its enactment, without the testimony or even knowledge of the small companies and individuals affected.

If we could learn the reasons for this tax preference item, or could look at some examples of how promotion expenses have been abused, we would welcome the opportunity to work with your staff to come up with a reasonable alternative to the present punitive law.

I would like to draw your attention to an example of how TEFRA affects a typical small publisher, explained in the appended letter from one of our members to his congressman.

I wish to thank the committee again for providing me the opportunity of presenting the views of the Newsletter Association on a matter which vitally affects the small businessmen who comprise its membership.

SUMMARY OF THE NEWSLETTER ASSOCIATION'S TESTIMONY

SUBJECT:

The Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) made the promotion expenses of periodicals a tax preference item for sole proprietors, partners, and shareholders of S corporations.

PROBLEMS:

The Newsletter Association believes this tax is unfair and illogical because,

(1) It affects undercapitalized sole proprietors and partners who are trying to start a newsletter or periodical business, but it does not affect regular corporations which tend to be well-healed.

(2) It taxes a company's selling expense, which can amount to 20% to more than 40% of a company's total budget. We can understand taxing revenues, but fail to understand the logic of taxing our selling expense.

(3) If an individual is losing money, he still has to come up with the tax, under this proposal, which will most likely drive him out of the business. Newsletters are already a high-risk business, in which more than half of all newsletters launched have to cease publication.

(4) The tax was inserted into TEFRA without testimony or knowledge of the individuals who are affected.

(5) It allows publishers to take the promotion expenses as a tax preference, or amortize them over 10 years. We find the 10-year amortization period preposterous, since renewal rates tend to be 50% in a start-up phase and, at the most, 70% in later years.

SOLUTIONS:

The Newsletter Association urges the repeal of this provision, so that its members can go about the business of trying to start newsletters and create jobs instead of worrying about the nightmare of TEFRA. Failing repeal, we have other solutions:

(1) Make the provision effective only for passive investors and limited partners, so that any tax shelter abuse is addressed.

(2) Restrict the provision to start-up expenses but reduce the amortization period to two years to conform to the industry's average of 50% renewal rates for start-ups. This has precedence in the tax code.

(3) Allow sole proprietors and partners who have incorporated as a result of TEFRA to do so tax-free. Many cannot come up with the cash to pay the tax but they can't incorporate to avoid the tax because they would have to pay ordinary income tax on all their deferred subscription income.

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TIME-SAVING, WORK-SAVING NEWS & IDEAS FOR TODAY'S BUSY CPA

January 31, 1983

Special Delivery

Hon. F. James Sensenbrenner, Jr.
House of Representatives
315 Cannon Building
Washington, D.C. 20515

Dear Mr. Sensenbrenner:

As we discussed yesterday after the Brookfield Town Hall meeting, I'm requesting your assistance to correct a serious inequity in the Tax Equity and Fiscal Responsibility Act (TEFRA). Without this correction, many small businesses that publish newsletters could be forced either to close their doors or to sell out to large corporate publishers.

As you requested, I am restating the problems in writing to assist you in acting on this matter.

The Problem

Section 201(b)(1)(B) of TEFRA includes "circulation expense" as a tax preference. So far, I haven't been able to determine the reason for this. I do know, however, that this new provision does not apply to those publishers who were already incorporated at the time TEFRA became effective.

The result on unincorporated publishers could be catastrophic. Circulation expenses are an essential part of our business--the only means by which we can obtain additional subscribers. (This is an important distinction from many tax preferences that are merely "paper deductions," such as depletion and accelerated depreciation.) Typically, circulation expense is the largest expense for a newletter publisher.

To illustate the problem, let's assume that an unincorporated newsletter publisher has the following income statement:

Sales		$400,000
Expenses		
Circulation	$150,000	
Editorial	120,000	
Administration	100,000	370,000
Net income		$ 30,000

If we further assume that the publisher is married, has two children and itemized deductions of $6,000, his tax situation will be as follows:

Old tax law (1982 & prior):	
Federal income tax	$ 3,000
Income after Federal tax	$27,000
TEFRA (1983 & after):	
Federal income tax ($20,000 more than under old law)	$23,000*
Income after Federal tax	$ 7,000

*Would be even more if taxpayer has tax preferences other than circulation expense or has certain types of itemized deductions.

Obviously, this publisher could no longer support his family on the income remaining after paying Federal income tax.

At first, it would appear that this publisher could solve his problem merely by incorporating, since TEFRA doesn't include circulation expense as a tax preference for corporations. However, publishers typically have a large "deferred subscription liaiblity," that is, an obligation to provide all issues due for the remaining term of each subscription. Under Section 351 of the Internal Revenue Code, this entire liability would be taxed to the publisher as ordinary income on the date of incorporation. For even a small publisher, this additional tax liability could easily exceed $100,000.

Thus, under new TEFRA Section 201, many small publishers will be faced with only two possible alternatives: discontinue operations or sell out to a corporate publisher.

The Solution

Immediate elimination of the portion of TEFRA Section 201(b)(1)(B) that includes circulation expense is the only hope of survival for many small, unincorporated publishers. I stress the word immediate, because this unwieldly tax provision is effective right now. Every time that I send out direct mail advertising with a cost of $10,000 my Federal income tax liability increases by $2,000. And, if I discontinue this "circulation expense," my business will die through the normal attrition of subscribers.

As I mentioned yesterday, I have two concerns about obtaining remedial legislation. First, the whole tax preference area is very complex. Thus, many IRS personnel and legislators may not understand the devastating effect of Section 201(b)(1)(B) on small publishers. Secondly, I estimate that about 100 unincorporated businesses face this problem. This number may not be large enough to arouse sufficient political support (even though it is a matter of financial survival to most of these publishers).

Thanks for your sincere interest in correcting this inequity. I appreciate your taking time to talk to me yesterday.

Very truly,

Jerry S. Huss, CPA
Publisher

JSH:pjs

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DOUGLAS L. PERRY

April 13, 1984

Senate Finance Subcommittee on
Oversight of the Internal Revenue Service
c/o Roderick A. DeArment, Chief Counsel
Committee on Finance
Room SD-219, Dirksen Senate Office Building
Washington, D.C 20510

Re: April Hearing -"Impact of The Federal Income Tax System on Productivity and Economic Growth"

Gentlemen:

The purpose of this letter is to provide a written statement of the undersigned for purposes of the captioned proposed hearing.

The subject and substance of this letter is the same as a letter first written to Senator Mark D. Hatfield on July 29, 1974, supporting his proposal of a form of "total" tax reform, to repeal the present federal tax laws and substitute a flat rate on gross incomes. The comments were relevant then, are relevant now, and will continue to be relevant until there is meaningful reform. Such proposals are currently before Congress.

The American people are enraged and bear a deep feeling of frustration. They are first, and foremost, well educated and sophisticated. Their anger stems essentially from what they believe to be a legislative disregard for their needs and wishes. They see laws enacted which often are at counter-purposes with other laws and objectives, and often destructive of the very goals and priorities they deem to be valid. The present system of federal income tax law of the United States is a shameful example of this, which, as will be demonstrated in this letter, is an incentive to non-productivity and therefore a parasitic drag on economic growth.

I also believe that the American people will no longer be content with the esoteric rhetoric of their elected representatives in the absence of meaningful action. As an example of this, I would point to a speech made by Senator Jacob Javits as republished in the June 1974 issue of the "Barrister" (publication of the Young Lawyers' Section of the American Bar Association) entitled "Lifting the Weight of Executive Power." In that article, he decried the shift (by default) of legislative initiative from Congress to the Executive Department of the Federal Government, and proposed a program for Congress to regain its proper legislative initiative and prerogative. I believe the American people heartily embraced Senator Javits' proposals. But, their mood is still one of anger. Mr. Javits commented that this shift of power had occurred over the past thirty years, and that he had watched it almost throughout. I believe the American people would want to ask: "Why then have you not made these proposals before?" The American people may well not be satisfied with entrusting that task to those who have stood by and, by their inaction, permitted it to happen. Senator William Fullbright may have most accurately touched the mood of the American people when he is reported to have stated (upon his defeat in his bid for re-election) that he felt the mood of the American people was against all incumbents. Ten years have not found the Congress to have regained its proper role of meaningful legislative initiative.

There is a "new frontier" for America, and it is to solidify what we have gained in the past, and to move forward toward goals concerned with the quality and equity of life, and away from goals which are concerned with the mere quantity of goods and services. The second set of goals does not necessarily produce the first.

It is submitted that the election to President of first Jimmy Carter, and then Ronald Reagan, was in no small part due to their respective campaign promises (and the long standing hope of the people) for simplification of government. The American people long for a government which would, by the repeal and future absence of inept and confounding regulations, return to their lives a greater measure of self-determination, the kind of self-determination which has resulted in the greatness of the United States. To do this, however, requires a faith in the ability of the common person to wisely exercise his powers of self-determination, the kind of faith reverently shared by the framers of our Constitution and beginning political philosophers, most notably Thomas Jefferson. With this faith, our forefathers retained their right of self-determination and built the Country which we enjoy today.

Somewhere along the line we seem to have lost a large measure of this faith, since we have witnessed a growth of governmental-determination and a wane of self-determination. In the frightening revelations of "Watergate," we witnessed the arrogance of power, by which our elected representatives placed themselves above the law for purposes deemed by them to be "expedient." The testimony was too horribly similar to the testimony in other famous trials held at Nuremberg, Germany.

Many people with whom I speak, are sick of the growing volumes of federal laws and regulations which they justifiably believe to now constitute not only an unwarranted and unreasonable invasion of their private affairs, but also a suffocating stranglehold on their personal and economic existence. Many of these regulations appear to be valid only as a means of justification for a budgentary allocation somewhere in the evirons of a particular government agency.

I am too often reminded of a statement once made by one of the Commissioners of the Federal Trade Commission, in his dissenting remarks concerning a proposed FTC Study of the Household Plant Industry, that it would be so worthless as an expenditure of public funds as to be something like "trying to put socks on a chicken." This uselessness and arrogance seems to attend much of the business of federal agencies, including the Internal Revenue Service. Indeed, in much of the litigation involving federal agencies, American business no longer seems to even make the challenge of whether a ruling or regulation is a proper exercise of power granted in the enabling legislation, for to do so in extended litigation with any of the federal agencies would literally bankrupt the private litigant. Thus, federal agencies, with this arrogance of overwhelming power and resources, have the ability to overstep and overreach their intended purposes and powers. It is also becoming frightfully apparent that the federal government, which was intended to foster and promote good faith commerce, now in many cases is so overly restrictive, and the cost of reporting and compliance so great, that many good faith and worthwhile projects of commerce are abandoned.

Could it just be possible that regulatory agencies, including the Internal Revenue Service, are in point of fact doing the best job possible, when the real fault lies in the fact that the laws they administer are idiotic?

In our federal tax laws, we have witnessed the simple grant of power to Congress to raise revenue (the 16th Amendment to the U.S. Constitution) to result in a disjointed tax structure which

grants disguised, indirect subsidies that cannot be accurately quantified (despite the popular arguments that quantification is possible through measuring projected revenue loss) and their potential acceptance or use (i.e., the shift of funds) unknown until long after the fact. Such quantification techniques have never been valid; and if you desire recent, demonstrative evidence, simply look to the recorded mismatch between projected and actual revenue loss in the deduction granted for Individual Retirement Accounts. Moreover, if subsidies are truly warranted, let them be out in the open, direct, and in terms of stated dollar amounts, so that the American people can clearly see who gets what and how much. Under our present system (subsidy by tax shelter) they cannot determine (prior to the grant) the propriety of an indirect subsidy which is granted in the form of a tax deduction or tax credit.

Our federal tax laws feed and promote inflation, the waste of energy and natural resources, and direct loss of productivity. Where is the incentive of management to resist increased wages when he knows that his concessions at the bargaining table can be recouped, not only through increased prices, but, more importantly, in the reduction of his taxes, since he will pass along a part of the increased labor costs to the American taxpayer when he claims an increased tax deduction and thereby lowers the net taxable income upon which he will pay taxes? This lessening of his share of taxes requires other taxpayers (indeed in part the very labor force which negotiated the higher wages) to pay more taxes, and also to pay again in the form of higher prices for the goods on which prices will be raised to recoup the increased labor costs. Not incidentally this mechanism has also priced American labor and industry right out of the world marketplace.

If, wages were not deductible, management would be more concerned with productivity (output per man hour) because any incremental decrease in productivity (i.e., paying increased wages for the same level of production) would come directly out of profits, without the offsetting tax reduction.

The very same thing can be said for the manufacturer's other costs, and particularly his cost of energy and raw materials. Where is the incentive to resist cost increases in the price of energy and raw materials if management can pass along a portion of those cost increases to the American taxpayer?

In short, I truly believe that the American people know that inflation hits them twice, once in the form of higher prices for goods, and secondly in the form of higher taxes which they must

pay (to offset the effect of the manufacturers' increased tax deductions and thereby lower effective tax burden).

You wish to consider the issue of productivity? Start with an understanding of productivity! Start with the same understanding that our competitors in the world marketplace so ably demonstrate to us today. That productivity means getting more out of each hour of labor spent, that productivity means getting more out of existing and still useful plant and equipment.

In the operation of the investment tax credit we see cogent evidence of the absurd manner in which our tax laws work at direct cross-purposes to the announced goal of productivity. We are involved in what may well be a life and death struggle in our environment and our supply of energy and natural resources. We are therefore concerned with the productivity of machines and equipment, since longer and more efficient use of such machines, equipment and tools, relieves the demand on energy and raw materials used in their manufacture. However, with the investment tax credit, we show the manufacturer that it is often to his immediate economic benefit (by reduction of his tax bill) to scrap what may be a perfectly usable machine (with substantial remaining useful productive life) and invest in new equipment, the cost of which is indirectly (again the indirect subsidy) borne by other taxpayers. The result? Again the American taxpayer pays a portion of this new cost. And, what is he paying for? He is paying for an unnecessary and unjustifiable increase in the demand on shrinking energy resources and raw materials which are used in the manufacture of the new machines and equipment; and, he is also paying for the loss of productivity which results when the replaced machine is scrapped. Would it not be better that the manufacturer use (to its fullest extent) the older machine and thereby remove this burden from the taxpayers, and in no small way also reduce the ever increasing demand on energy and raw materials?

When viewed in this manner, the investment tax credit is counter-productive, since its long-range effect is loss of productivity. True, its short-range effect may be some (unquantifiable) temporary increase in the gross number of jobs, but, its sustained and long-term effect has been disastrous.

The principal American taxpayer is the wage earner. He must equip himself to do his job. He must pay to provide transportation to and from his place of work. He must present himself in a presentable manner at and on his job. In gaining his skill, his "cost" (i.e., his investment) in his schooling and/or training ever increases. But, he is not permitted to "depreciate" the

costs of this investment (i.e., deduct a portion of his education costs) over the balance of his working life. It can be argued that his investment in education is exactly the same as the investment in a machine by a manufacturer, except that the wage earner is not able to reduce his taxes each year by a portion of those costs. It is said that such an asset (the education and/or training) does not have a "useful life" or is not a "wasting asset." These are absurd, artificial judgments, which are used to justify the granting of a depreciation deduction in one case (the purchase and use of a machine) and to deny it in another case (the purchase of an education or skills to do a job) and bear no relevance to economic reality or substantive equality of treatment under the law. If there is productivity in this present economic system, it is provided by this wage earner, because he alone must bear the full economic brunt of his own non-productivity, while at the same time shouldering the increased tax burden of the wastefulness of the system itself.

The answer is not to grant further deductions in the case of the costs of acquiring an education, or other skills, or transportation, or clothing; but, rather to do away with existing deductions. Then there would be equality, the manufacturer with his cost of goods sold, and the wage earner with his costs of services rendered.

In point of fact, except for his or her few deductions (and they truly do pale to insignificance when compared to widely used shelter techniques), the American wage earner is required to pay a "gross-receipts" type tax. In other words, his gross income is most nearly equated to his gross receipts. He does not offset his "cost of services" before deriving his gross income in the manner that a manufacturer or other business does. He therefore has all the incentive there is to be highly productive, to acquire long lasting and durable goods at the best price attainable, since these are the tools which comprise his "cost" of earning his wages. Do you not think it would be fair, and economically sound, to require manufacturers and other producers to do the same? I sincerely believe the American taxpayer does.

Therefore, I believe a proposal, to do away with all deductions and credits, and, in its place, to have a simple flat rate percentage tax, to be applied against the gross receipts of a taxpayer, to be most economically rational and equitably justifiable. In the case of corporations (or other such artificial earning entities) "double taxation" could easily be avoided to pass along a single tax to the shareholders who receive the dividends. Since all taxpayers would pay the same rate, whether the earnings were taxed at the corporate level or the shareholder level would make no difference.

Administration of the tax laws would also be simplified and made less costly. I believe the record will show that in excess of 80% of the budget of the Internal Revenue Service is used in determining the correct use of deductions. At the same time, there is a way to accurately quantify the enormous loss of productive effort on the part of taxpayers to attempt to make full use of those deductions. I do not accurately recall the estimate of total man hours required for compliance with the federal tax laws (it should be readily available to you), but remember it to be in the neighborhood of 360 million man hours. What is the effect on productivity when this essentially wasted labor is fed into the equation?

To say that people would not invest their money or engage in productive effort unless they are given preferences, such as preferential tax rates on capital gains, tax-free income, etc., is at the same time an absurd argument and a slur against the proven industry of the American people. Too many investments are made today, not because of their "real" economic significance, but rather for their tax effect. I submit that our general economic health is not promoted by such activity; nor, is our general psychological and moral health as a nation promoted by such an engagement of citizens in an endeavor to constantly "beat the system."

History demonstrates that Congress has used the power to lay and collect taxes for purposes of stimulating and directing the economy by attempting to channel the investment of funds by providing tax incentives. Our experience with this use has proven that it is not economically appropriate or equitably justified in that it grants unknown, unquantifiable and uncontrollable indirect and undisclosed subsidies. It channels funds to and from the various sectors of our economy in a way that the effect is not known until long after the channeling has taken place. It results in the grossest of inequities, and encourages the establishment and maintenance of special interests which exert inappropriate pressures on our legislative system; and, further induces noncompliance with the law itself, to the point that, at times, "cheating" on one's taxes almost seems to be regarded as acceptable behavior. No system can survive which breeds the contempt of its citizens.

I am also of the deep and abiding conviction that the framers of the 16th Amendment to the U.S. Constitution (which granted to Congress the power to lay and collect taxes on income) intended Congress to use this power only to collect revenue in a broad and equitable manner, in order to pursue programs, by direct subsidy or expenditure, which the elected representatives

believed to be valid. I do not believe that they intended the power to be used (even incidentally) as a "tool" to achieve desired economic goals. However, early on the Supreme Court held that if the principal purpose was to raise revenue, the fact of conferring an incidental benefit (even if intended) did not vitiate the Constitutional authority. Even if this principle could be said to have been valid in the beginning (which is highly doubtful) and not merely a construction by the Court to permit Congress to do what it desired at the moment, the current tax structure bears little relevance to the laying and collection of taxes, but rather clearly discloses that the "principal" purpose of our present tax system, when considered as a whole, is to control and affect the national economy.

This result I believe to be a usurpation of the lawful Constitutional grant of authority. A tax system involving a fixed tax rate on all incomes, with the dollar amount of tax to be paid to be therefore determined by the amount of one's income, would be consistent with Constitutional intent.

How would the actual rate of tax be determined? As a possible suggestion, a fair, and accurate method would seem to be the deriving of that percentage by dividing the amount of the projected federal budget for a coming fiscal year (i.e., total projected expenditures) by the prior year's total, "real" national income. The (tax rate) percentage thus derived would then be the tax rate each and every taxpayer would pay to support the programs and expenditures of the federal government for the ensuing year.

Fortunately, this might also require the federal government to live within its budget. And, if the federal government did (which every American would be justified in expecting, since he is asked to do the same) there would be no reason for increase to the national debt. In fact, provision could be made in the projected federal budget for an amount each year to retire that national debt over a period of years. When an American taxpayer borrows money, he knows he has to pay it back over a determined period of time. If he is required to do this in his personal budget, he has every right to ask that his government will do the same in its national budget.

The task of meaningful tax reform in the manner here outlined would not be an easy one, since the Internal Revenue Code of 1954, as amended, is a guidebook of special interest legislation. Despite the "bleats," however the "weaning" process would work. The question is whether anyone has the guts to do it. Perhaps the repetitious offering of such legislation would

shed light upon, and force Congress to face, the problems and questions suggested in this letter.

It has become all too painfully apparent to the American people that his type of comprehensive, meaningful tax reform legislation would not originate in, nor clear, the Ways and Means Committee of the House of Representatives, as evidenced by the historical and so-called "tax reform" enactments, including legislative proposals currently being considered. This historical record is taken by many (if not most) people as due proof of insincerity. Like most people out here, who have witnessed for most of their adult lives the "knee-jerk" reactions of Congress, I likewise do not hold out much hope for meaningful action to come from this Hearing. However, with the same foolish hope that Don Quixote took to the windmill, I wish you well in your instant deliberations, and remain,

Sincerely yours,

David L. Wolfe, Jr.
J.D., LL.M. (in Taxation)

DLW:ch

cc: Senator Don Nickles

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